Gregory G. Zigulis, BSCE, MBA, CIH, CSP, B11 LMSS™ 1365 Bertram Street Rogers City, MI 49779 734.604.0796

e-mail: <u>zigulisg@gmail.com</u> web: <u>www.sixthsensesafetysolutions.com</u>



Summary of Experience:

37 years of occupational safety, health (including industrial hygiene) and environmental management experience within several industries. This includes roles as an Air Force Bioenvironmental Engineering officer (final rank of Captain, with industrial hygiene and environmental responsibilities), regional Occupational Health and Safety (OHS) management for a hazardous waste cleanup company, OHS management for a Prime Contractor to the Department of Energy (Oak Ridge, TN), construction safety and construction fatality research for the University of Tennessee under contract to the Department of Labor/Occupational Safety and Health Administration (OSHA), OHS management for a consumable dental supplies and metals related manufacturing/machining company, OHS management for an international gas engine manufacturer within a global automotive manufacturer, regional environmental, health and safety (EHS) management and global safety team member for a Tier 1 auto parts manufacturer, regulatory compliance focused EHS management for a national disaster restoration contractor under strict EPA requirements, OHS management for an above-ground limestone mining organization, and EHS consulting across several industries (including plastics, metals, automotive, construction, contractors to Federal OSHA and US EPA, and others).

Work areas of emphasis have included safety team development, incident investigation and causal factor analysis, employee-participative safety programs, facility environmental, health and safety related assessments, industrial hygiene (including air and noise sampling), respiratory protection, fall prevention and protection, machine safety, hazard identification and risk analysis, safety process improvement and cost reduction, EHS training and others. Other areas of focus include organizational gap analyses and assessments intended to improve safety culture, safety management and environmental management systems.

He is a certified ISO 14001: Environmental Management Systems certified Auditor, as well as an ISO 45001: Occupational Health and Safety Management Systems certified Lead Auditor. He has provided several organizations with live and web-based training on the requirements ISO 14001 and 45001 and internal auditing concepts.

Skills

- Safety, health (OSHA) compliance and risk assessment
- New plant & facility start-ups
- Development/implementation of facility and companywide safety and health programs
- Comprehensive HSE management system and compliance auditing
- Serious and fatal injury prevention programs
- Continual-improvement based approaches to integrated safety
- Incident investigation (procedure development, training, field implementation)
- Contractor safety vetting and management
- Solid background in multiple areas of OSHA emphasis including assessment of air exposures, machine guarding, energy control (lock/tag/try)
- Broad based expertise from comprehensive USAF training, graduate courses, continuing education and hands-on application

Work Experience

Greg began consulting after 30 years of service to a diverse range of industries, to include as an officer in the USAF (Captain), Department of Energy/construction management, fatality research, environmental remediation and manufacturing. The consulting firm that he developed, GGZ EHS Services, LLC (dba Sixth Sense Safety Solutions), provides HS&E related technical services.

Greg's area of focus has been in the conduct of risk assessments/gap analyses, safety management system assessments, assessments of compliance with OSHA regulations and implementation of OSHA standards such as for respirable crystalline silica.

A summary of his work experience is shown below:

2015 - Present: Owner, Sixth Sense Safety Solutions

- Comprehensive HSE consulting; focus on gap analysis/risk assessment, management system and program development, regulatory compliance
- Construction and General Industry related expert witness support for fatal and serious injuries

2013-2015 Carmeuse Lime & Stone

- Regional S&H Manager for 3 regional mining/processing/loading sites
- Comprehensive S&H program development and/or management

2011-2013, InStar Services Group

- Senior Vice President, EHS
- Manage EPA Region 4 Administrative Agreement, helped bring company to compliance

2006-2011, TRW Automotive (now ZF-TRW)

- Regional HSE Manager, member Global Team, 16 sites in US, Canada, Mexico
- Point of contact with VP of Ops for \$2B unit; comprehensive support to sites to include for new facilities and contractor safety management site practices

2004-2006, Global Engine Manufacturing Alliance (GEMA) (Now part of Stellantis)

- S&H Manager
- New plant startup, state of art machines, model hiring plan, complete system development, medical programs

2002-2004, Sybron Dental Specialties/Kerr Manufacturing

- Health and Safety Manager; local plants plus corporate assistance
- Focus on manufacturing safety and industrial hygiene

1998-2002, Construction Research and Policy Center (CRPC)

- Associate Director
- Construction fatality and safety management system research for Federal OSHA

1994-1998, MK-Ferguson of Oak Ridge Co., Morrison Knudsen/Washington Group

- Safety/Industrial Hygiene Manager (essentially Deputy Director, EHS) for this construction management firm to the Dept. of Energy
- Industrial hygiene, construction safety, occupational medical, fire/emergency management

1990-1993, Chemical Waste Management (CWM), Rust International

- Health and Safety Manager for 13 state Midwest Region conducting construction-like processes
- Safety and industrial hygiene support for construction with environmental remediation

1985-1990, United States Air Force (Captain)

- Chief, Bioenvironmental Engineering, Reese AFB TX and KI Sawyer AFB MI
- Comprehensive HSE support for military and base organizations, plus remote base support

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Education

- University of Tennessee Graduate level course in Human Factors Engineering & Ergonomics (2000)
- University of Tennessee master's in business administration (MBA), General Management (1999)
- Annual continuing education, various topics, required to maintain CIH and CSP credentials –
 topics such as in hazard identification and risk assessment, industrial hygiene, safety, ethics
 and training related topics (relates to Certification Maintenance and Continuing Education
 Unit requirements)
- USAF School of Aerospace Medicine Industrial Hygiene, Safety and Environmental Graduate Level Courses (1986)
- University of Michigan BS Civil Engineering (1985)

Certifications/Licenses

- B11 Licensed Machine Safety Specialist (LMSS™) since 2022
- Certified ISO 14001:2015 Auditor (since 2016) and ISO 45001 (Occupational Health and Safety Management Systems) Lead Auditor (since 2020)
- Passed exam for 3M Safety Training Competent Person, Fall Protection Competent Person (June 2019)
- Certified Safety Professional, Board of Certified Safety Professionals, #10562 since 1991 (cycle due for renewal in 2027)
- Certified Industrial Hygienist, American Board of Industrial Hygiene #5088 since 1990

QUALIFICATIONS

I have a Bachelor of Science degree in civil engineering with a Master's degree in Business Management (MBA). With over 37 years of professional experience, I've worked in the development and implementation of safety, industrial hygiene and environmental programs for organizations with industrial, construction, medical, administrative and environmental operations. My professional certifications include "Certified Safety Professional" (CSP) through the Board of Certified Safety Professionals (since 1991) and "Certified Industrial Hygienist" (CIH) through the American Board of Industrial Hygiene (since 1990). I have held positions from plant-level HSE manager, to Senior VP of EHS, and in-between.

I began my career in the "safety, health and environment" arena in 1985 as an Air Force Bioenvironmental Engineer. In that capacity, I provided base-level comprehensive industrial hygiene, environmental and safety services to over one hundred ongoing industrial and facility operations (per base). Services included workplace air sampling for gases and particulate matter in air, noise monitoring, radiation monitoring, ventilation testing, respiratory protection programs, hazard communication programs, and many others. I worked with base occupational medicine physicians to develop appropriate medical monitoring programs for industrial, maintenance, facilities, aircraft flight line, medical and dental workers.

I became the Regional Safety and Health Manager for a construction focused environmental remediation and industrial services contractor in 1990, and was responsible for industrial hygiene, safety and medical programs for operations in a 13-state area. While in this position, I developed, implemented and maintained worker protection programs for a variety of physical and chemical hazards, at both remediation projects and clients' industrial facilities. In this capacity, I honed my skills in the areas of accident/incident investigation, the development and presentation of 8 hour and 40-hour classes for field safety supervisors, unique sampling strategies for exotic chemicals, and the selection of personal protective clothing to include gloves, suits, boots and respirators.

In 1994, I moved to Knoxville to become Safety/Industrial Hygiene Manager for a construction management contractor in Oak Ridge, TN, as a prime contractor to the Department of Energy. I managed industrial hygiene, safety and occupational medicine programs, and in that role, developed or administered programs for work involving potential exposure to beryllium, asbestos, fiberglass, lead, mercury and many other types of workplace hazards. I also helped establish an

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occupational medical clinic that provided ambulatory care and OSHA/DOT required physical exams and tests to the workforce. This work was unique in that the projects covered up to 1200 workers scattered over 5 Department of Energy work sites, working at times on over 400 active work-orders.

In 1998, I joined the University of Tennessee's Construction Research & Policy Center (a unit of the College of Business) as Associate Director. The bulk of my work for the University was conducted for the National Office of the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH). While at the University, I worked on national studies pertaining to safety and health management systems, occupational fatality causes, injury and illness surveys and Fortune 500 owners' programs for construction contract pre-qualification and award systems.

I joined Sybron Dental Specialties/Kerr Manufacturing (based out of Romulus, MI) as Health and Safety Manager in May 2002. In that capacity, I provided Health and Safety related leadership and direction to 7 domestic and 4 international manufacturing sites. I was instrumental in helping the organization develop programs required to comply with the OSHA Process Safety Management standard.

In June 2004, I joined the Global Engine Manufacturing Alliance, LLC (GEMA) (an engine manufacturing alliance between DaimlerChrysler Corporation, Mitsubishi and Hyundai, and now part of FCA) in Dundee, Michigan as H&S Manager. In this capacity, I developed many H&S programs from scratch, all the while conducting equipment reviews (risk assessments) of hundreds of pieces of equipment to ensure the installation of safe equipment. Programs that I developed included those for energy control (lockout/tagout), personal protective equipment, hearing conservation, confined spaces, Employee Assistance Programs, and occupational medical programs to include those for injury care, first aid/CPR/Automated External Defibrillators, wellness programs, and many others. Equipment that I reviewed at OEM facilities and in-plant included those required for machining and assembling engine parts (CNC machines, gantry systems, sub-assembly and assembly), filter gallery equipment (filters, pumps), material handling equipment, hoists/cranes, mist collectors, and the general facility.

I was recruited by and joined TRW Automotive (now ZF-TRW) in September of 2006 and was in the role of Regional HSE Manager. I worked there until November of 2011. Based out of Livonia, MI, I served as the (Braking & Suspension) business unit Point of Contact for HSE and as such provided routine direct support to 16 business unit manufacturing and assembly locations in the U.S. and Canada, as well as periodic direct support to several TRW plants in Mexico and Brazil. In that role, I was also the North and South America lead for metalworking fluid related HSE support, and the U.S. lead for workers' compensation programs.

In November of 2011 I joined InStar Services Group to help the organization meet critical Environmental Protection Agency (EPA) requirements. In that role, I reorganized the HSE function, changed compliance, auditing and training processes, and ultimately helped the organization satisfy EPA requirements. This was of direct value to the company's investors; the company was sold in early 2013.

In February of 2013, I joined Carmeuse Lime & Stone and added aboveground metal/nonmetal mining to the list of industries I've assisted. Based out of Rogers City, MI, I provided support to the Rogers City, Cedarville, and Port Inland, MI locations. In this capacity, I provided leadership in health and safety training, hazard recognition, MSHA regulatory interface, and program development.

I formed Sixth Sense Safety Solutions in May of 2015, with the belief that my experience and skill set can help provide significant value to a variety of companies and business types. Since then, services have included gap analysis relative to OSHA and EPA requirements, serious injury and illness prevention program consulting, and new-plant start-up assistance.

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In summary, I've worked for organizations both "large" and "small," in public, private, military, academic and highly regulated governmental settings; both in the U.S. and abroad. I have strong experience from within several different types of industries.

Affiliations / Leadership roles

- Member of the Standards Development Committee (SDC) of the American Society of Safety Professionals (ASSP), 2022-present
- Greater Detroit Chapter Representative (Member) to the Advisory Group of the American Society of Safety Professionals (ASSP), 2022-present
- Assistant Administrator to the Consultants Practice Specialty of the American Society of Safety Professionals (ASSP), beginning July 2023
- Member of US Technical Advisory Group (TAG) to ISO TC283 (for ISO 45001, the International Standard for Occupational Health and Safety Management Systems), 2021present
- Member of ANSI / AIHA Z10 Committee (US National Standard for Occupational H&S Management Systems) 2017-present
- Adjunct Instructor, Alpena Community College, Industrial Safety, 2016-2017
- Western Michigan Industrial Hygiene Society (WMIHS) (Incoming President 2023, and Former Director [term expired])
- Automotive Industry Action Group, Health and Safety Participant, 2011
- Secretary, Educational Resources Division of National Safety Council, 2000-2001
- American Society of Safety Professionals (Member since 1990)
- American Industrial Hygiene Association (Member since 1986)

Published or cited as Reference in Books / Articles / Technical Papers

- 1. Wolfsberger, J. & Zigulis, G. (2023, April). Integrating OSH into the business. *Professional Safety*, 68(4), 30-34.
- Zigulis, G.G. (2023). ANSI/ASSP Z10.0, Occupational Health and Safety Management Systems. In J. Haight (Ed), Safety Professionals Handbook (3rd ed., pp. 339-355). American Society of Safety Professionals.
- "The New ANSI/ASSP Z10.0 Standard and Its Implementation", published in ohsonline, https://ohsonline.com/articles/2020/06/01/the-new-ansiassp-z100-standard-and-its-implementation.aspx, June 2020
- 4. "So You're a Systems Person, Eh?" article published in Professional Safety, May 2017
- 5. "Your Experiences with Hazard Observation," www.pro-sapien.com/blog/2016/08/challenges-in-a-polynymous-practice-your-experiences-with-hazard-observation/
- "Welding Safety and Health Considerations," Occupational Health & Safety, December 2015
- 7. "Behavior Based Safety Programs Should They Be Implemented?", Occupational Health & Safety, October 2015
- 8. "Respiratory Protection/The More Things Change", Occupational Health & Safety, July 2015
- 9. OHS 10, Leadership Excellence in Health, Safety and Environment, AIAG, 8/2011
- 10. "Working for Success," GEMA World News, Q3 2005
- 11. "Communicating Health Risks Working Safety with Beryllium," Facilitator Manual prepared by the Beryllium Health Risk Communication Task Force, US Department of Energy, April 2002
- 12. "An Analysis of Fatal Events in the Construction Industry 2000", University of TN report to the Department of Labor, OSHA, Office of Statistics, February 2002
- 13. "Sheraton Fall Still Under Scrutiny, The Case Raises Key Safety Issues for the Construction Industry," Sacramento Bee, November 6, 2001
- 14. "Applicability of OHSMS in the Construction Industry," <u>www.aiha.org/aihce01/handouts/pf127platner/pf127platner.ppt</u>, 2001
- "Building Safer Highway Work Zones: Measures to Prevent Worker Injuries from Vehicles and Equipment," DHHS, CDC, National Institute for Occupational Safety and Health, April 2001
- 16, "Construction Research Center Established at UT", Tennessee Today, 3/15/2001
- 17. Book review of "Fall Protection and Scaffolding Safety: An Illustrated Guide," for National Safety Council's Safety + Health magazine, January 2001

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18. "Book offers thorough review of safety by design," book review of Safety Through Design (Christensen and Manuele) for National Safety Council's Safety + Health magazine, July 2000.

Presentations and Seminars

- 1. Industrial Hygiene's Role in Perfecting Your Respiratory Protection Program, Webinar presented for OHS Magazine, Sponsored by Honeywell and Moldex, 9/2021
- "I've Been Assigned Responsibility for Industrial Hygiene: Now What?" Webinar to Mid-Michigan Chapter of ASSP, Safety Leadership Series, 11/2020
- 3. "What Now? How to Provide Safe, OSHA-Compliant Workplaces in the Age of COVID-19," presented as a Webinar on behalf of OH&S Magazine, 8/2020
- The Use of ANSI/ASSP Z10.0 (Occupational Health and Safety Management Systems) and Worker Engagement During the COVID-19 Pandemic Greg Zigulis, CSP, CIH Sixth Sense Safety Solutions July 30, 2020 Presented as a Webinar for the American Society of Safety Professionals/webcasts/2020/06
- 5. "Best Practices for Implementing Occupational Health and Safety Management Systems," Webinar Presentation for ASSP/Consultants Practice Specialty, 4/2019
- "ISO 45001 Health & Safety Management System Fundamentals and Requirements for Auditing and Legal Compliance," Webinar presentation given at request of Nimonik, June 2019
- 7. "Employee Safety Incentive Programs and Post-Incident Drug Testing: What Can We Really Do?", Presentation, Michigan Safety Conference, Risk & Insurance Division, April 2017
- 8. "Silica in Mining," presentation to Holmes Safety Association, Marquette, MI, 1/2017
- 9. "Silica in Mining," presentation to Holmes Safety Association, Gaylord, MI, 1/2017
- Session Chair and Organizer, "Respirable Crystalline Silica," Western Michigan Industrial Hygiene Association Professional Development Conference, Grand Valley State University, November 2016
- 11. "Safety Leadership," Oakland University EHS 245, November 2016
- 12. "ISO-DIS 45001 and Other OHS Management Systems," conference presentation, Construction Association of Michigan, December 2016
- 13. Contractor Construction Safety: How to Ensure It, OHS Magazine webinar, 6/2016
- 14. "ISO 45001: Background, Status and Implementation Considerations," Construction Association of Michigan, 4/2016.
- East TN Chapter of American Industrial Hygiene Association, "Fatalities in Construction," Knoxville, TN, 10-01
- 16. U.S. Department Energy Symposium on Beryllium, "Beryllium Programs in Construction," Argonne National Laboratory, Chicago, IL 5-98
- 17. American Industrial Hygiene Conference, "Safety and Health Aspects of the Chicago Tunnel Flood," Boston, MA 10-92
- 18. Chicago Chapter AIHA, "Safety and Health Aspects of the Chicago Tunnel Flood," Chicago, IL 5-92





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