

Thomas P. Rudolph CIH, CSP, CAC, ARM, REPA
Environmental/Safety/Industrial Hygiene Expert Witness
Curriculum Vitae

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EDUCATION:

B.S. Degree Biology, Marquette University, Milwaukee, Wisconsin
M.S. Degree Genetics, Michigan State University, East Lansing, Michigan
M.S. Degree Industrial Hygiene, University of Michigan, Ann Arbor, Michigan

PROFESSIONAL QUALIFICATIONS:

- Certified Industrial Hygienist (CIH) (#3816)
- Certified Safety Professional (CSP) (#8853)
- California Certified Asbestos Consultant (CAC) (#13-5021)
- Certified EPA AHERA Asbestos Contractor/Supervisor
- Certified EPA AHERA Asbestos Project Designer
- Certified EPA AHERA Asbestos Building Inspector
- Certified EPA AHERA Asbestos Management Planner
- Associate in Risk Management (ARM)
- Registered Environmental Property Assessor (REPA)

CONSULTING EXPERIENCE:

- Testified as a Recognized Witness for California and Nevada Superior Courts
- Testified as a Recognized Witness for California Workers' Compensation Boards
- Testified as a Recognized Witness Cal-OSHA Appeal Boards
- Prepared Rule 26 Witness Federal Reports
- Member Westlaw Round Table and Forensics Group Witness Organizations
- Successful Environmental, Health and Safety Programs Consultant
- Member of the California Occupational Safety and Health Standards Board's Advisory Committees for General Industry and Construction Safety Orders.

RECENT LITIGATION CASES:

- Expert Witness for Defense in Roberts Electrical Contracting Inc. vs Chapman LLP et al. (Chris Heet Contracting) involving a multimillion-dollar asbestos lawsuit for alleged airborne asbestos exposures as a result of construction activities.
- Expert Witness for Defense in Foss vs Hall for a fall injury case in Nevada Superior Court.
- Expert Witness for Plaintiff in Vincent Saffo vs BNSF Railroad for an asbestos case in Kansas Superior Court.
- Expert Witness for Defense in Edward Quesada vs CR&R Incorporated for a workplace vehicle injury case in Superior Court of Arizona.

PRODUCT SAFETY ENGINEERING AND REGULATORY COMPLIANCE:

Cymer – San Diego, CA (1997-1999), Provided S2 product safety engineering and regulatory compliance support to microelectronics and semiconductor tool chip supplier.

Semitech – Austin, TX (1997-1999), Provided S2 product safety engineering and regulatory compliance support to microelectronics and semiconductor tool chip supplier.

Varian – San Jose, CA (1997-1999), Provided S2 product safety engineering and regulatory compliance support to microelectronics and semiconductor tool chip supplier.

Lam Research – Fremont, CA (1997-1999), Provided S2 product safety engineering and regulatory compliance support to microelectronics and semiconductor tool chip supplier.

Applied Materials – Santa Clara, CA (1997-1999), Provided product safety engineering and regulatory compliance support to microelectronics and semiconductor tool chip supplier.

SNM facility – Erwin, TN (1986-1992), Provided regulatory support from conceptual design criteria through construction of \$22 million uranium fuels recovery plant.

Nuclear Fuels – Erwin, TN (1986-1992), Worked on safety and quality aspects of conceptual design to de-convert highly enriched uranium (HEA) to low-enriched uranium (LEU).

Treatment, Storage and Disposal (TSD) facility – Erwin, TN (1986-1992), Prepared and implemented mixed hazardous waste/RCRA compliance (Part A/Part B permits); provided ongoing safety engineering and quality assurance support for project.

WORK EXPERIENCE:

September 2017 to Present (Part Time): **Senior Consultant**, Rimkus and Axis Consulting, Concord, CA

- Provided environmental, industrial hygiene and safety consulting and legal expert witness services.
- Subject matter expert regarding workplace and construction accidents and injuries, wildfire damage, indoor air quality, asbestos, mold and toxic chemical exposures, trip and fall, ladders, fall protection, machine guarding, working/walking surfaces, slip testing, ADA compliance, premise liability, confined spaces, hazardous energy, flammable/explosive materials, protective equipment, regulatory requirements, and employer/employee standard of care for single and multi-employer worksites.

September 1999 to February 2020 (Retired): **Occupational Safety and Environmental Compliance Manager**, County of Santa Clara, CA.

- Manager in the County Risk Management Department, responsible for the planning, development and implementation of legally compliant County-wide loss prevention and control programs, Workers Compensation programs, occupational safety and health programs, California OSHA compliance, and California EPA environmental compliance programs for the ninth largest county in the United States. During the last 20 years the County injury rate decreased nearly 50% while over \$25 million dollars of benefits/cost avoidance for the County was achieved. Over the same period of time, the County's liability insurance claim costs decreased by approximately 40%.

- Provided leadership and technical guidance to County Senior Management to ensure that environmental and occupational safety standards promulgated by Federal and State regulatory authorities are being enforced. No serious California OSHA or EPA regulatory citations or fines have been issued to the County in my time as OSEC Manager although it is the largest local employer (over 23,000 employees) and largest landowner in Silicon Valley, and has an annual budget of over \$8.8 billion dollars.
- Worked on multi-agency teams with the Army Corps of Engineers and others for flood control and environment restoration efforts including the Guadalupe River, Coyote Creek, and South San Francisco Bay projects.
- Participated in the billion-dollar litigation effort led by Santa Clara County that successfully sued the paint industry for the decontamination and remediation of pre-1978 homes which still have coats of lead paint.
- Managed a group of eight risk management and environmental professionals.
- Planned and conducted industrial hygiene surveys for chemical exposure and indoor air quality concerns such as asbestos, mold, lead and other occupational hazards.
- Served on the County Integrated Pest Management (IPM) Board which oversees the use of herbicides and pesticides on County property and facilities.
- Provided safety support for County construction activities including permitting, fall protection, scaffolding, forklifts, trenching/shoring, chemical storage tank permitting, and other Cal-OSHA related regulatory requirements.
- Visited facilities County-wide to conduct inspections and evaluations and take corrective actions.
- Represented the County at governmental regulatory meetings and litigation hearings.
- Established and administered County-wide contracts for risk management, occupational safety, loss prevention, and environmental services.
- Work as a team with Workers' Compensation, Insurance, and County Counsel in providing for the efficient investigation, case management, and settlement of claims made against the County.
- Organized, facilitated, and maintained training programs to enhance and encourage employee awareness of workplace hazards. Tracked pending risk management regulatory and legislative developments reviews and suggests modifications on legislative and regulatory proposals.

June 1997 to September 1999: **Senior Risk Management and EH&S Consultant/Corporate Manager**, SECOR/Rust Corporations, San Jose, CA.

- Development and implementation of risk management, quality [ISO 9000], environmental, health, safety [ISO 14000], trip and fall, ergonomics, scaffolding and fall protection, forklifts, trenching/shoring, laser safety, toxicology, process safety management, air/water permitting, Voluntary Protection Program (VPP), TSCA, machine guarding, litigation support, and emergency preparedness/disaster regulatory programs for several major businesses and corporations in the Bay Area and nationally, such as Cymer, Hewlett Packard, Apple, Applied Materials, and the Santa Clara Valley Water District.
- Planned, conducted, and interpreted industrial hygiene surveys for asbestos, mold, lead, cadmium, mercury, welding fumes, silica (total and respirable), and noise for several corporations in the Bay Area and nationally, such as Solectron and Waste Management.
- Directed and managed numerous high level risk management, environmental and safety projects.

- SEMI S2-93 third party product safety assessments, CE Marking, and risks fault tree analysis involving HAZOP/FMEA/FMECA/WHATIF evaluations. Product safety engineering and regulatory compliance support for Bay Area and national microelectronics and semiconductor tool chip suppliers, such as Cymer, Semitech, Semitool, Varian, Lam, and Applied Materials.
- Team leader for equipment and facility safety and quality assurance sign-off for Samsung Austin, Texas electronics DRAM fabrication facility (\$1.5 billion dollar investment).
- Prepared and submitted several FDA CDRH laser registration submittals.
- Safety oversight for several underground storage (UST) tank removal and re-liner companies, such as Sessions and Ulrich Incorporated. Developed plans for chemical tank farm exposure and explosion safety controls.
- Team leader for risk management, environmental, health, ergonomics, and safety audit of Lower Colorado River Authority (LCRA) in Austin Texas (electrical utility company).
- Participating in working standards group for SEMI S2-98 product safety revisions, particular involving ergonomics, industrial hygiene, laser safety, and process hazard analysis/risk assessments.

July 1992 to March 1997: **Safety and Industrial Hygiene Manager**, QS&H Department, Bechtel/Westinghouse Hanford Companies, Richland, Washington.

- Directed six managers and over ninety safety professionals providing support to operations for construction, decontamination, decommissioning, and environmental restoration activities (RCRA/CECLA) at the Hanford Department of Energy (DOE) reservation which was constructed by the Army Corps of Engineers. This site prepared and processed plutonium and uranium for use in nuclear weapons, and is now a superfund site being remediated under an approximately \$1.2 billion dollar a year budget.
- Prepared and implemented company's integrated quality, environmental, health, safety, air and water permitting, radiological, fall protection, forklifts, scaffolding, trenching/shoring, ergonomics, lead, asbestos, laser safety, chemical tank storage, and emergency preparedness programs, plans, and procedures.
- Established a certified onsite industrial hygiene analytical laboratory (including quality control and quality assurance requirements). Planned, conducted, and interpreted industrial hygiene surveys for asbestos, lead, cadmium, mercury, welding fumes, silica (total and respirable), and noise.
- Acted as part of a senior management team to establish configuration controls for company documents and correspondence. Acted as team leader in developing and implementing company work and quality control processes and documentation.
- Prepared and implemented first Hanford Tank Farms (60 million gallons of radioactive mixed waste) OSHA 120 Health and Safety Plan, including chemical exposure and explosion safety. Developed and implemented safety plan for Environmental Restoration Disposal Facility (EDRF) which is the largest radiological disposal site in the United States.
- Directed and participated in numerous high-level engineering process safety management reviews, safety analysis reports (SARs), safety analysis documents (SADs) and hazard fault tree analysis projects. Senior level participant in Directed Standards Identification and Requirements Documentation (SRIDS) for several retired Hanford nuclear facilities.
- Achieved a million man-hours without a lost time work accident, and prepared and submitted an OSHA Voluntary Protection Program (VPP) application.

April 1986 to July 1992: **Industrial Safety and Health Manager**, Nuclear Fuel Services, Erwin, Tennessee. Nuclear Fuel Services is the sole supplier of nuclear fuels for the United States Navy.

- Work responsibilities included development and implementation of plant radiological and non-radiological health and safety programs, including chemical hazards safety, respiratory protection, fire protection, insurance compliance, hazard communication, ergonomics, asbestos, scaffolding and fall protection, forklifts, trenching/shoring, lead, laser safety, toxicology, laser safety, chemical tank storage, and industrial hygiene monitoring.
- Prepared and implemented the company's mixed hazardous waste/RCRA compliance (Part A/Part B Permits) for a Treatment, Storage and Disposal (TSD) Facility. This was one of the first TSD permits approved for mixed waste by the Environmental Protection Agency. Additionally, provided ongoing safety engineering and quality assurance support for the project.
- Prepared and implemented company emergency preparedness and disaster recovery plan, along with NRC SNM licensing and ANI/OSHA compliance activities.
- Acted as team leader in developing and implementing facility work and quality control processes and documentation. Provided regulatory support from conceptual design criteria through construction of a \$22 million dollar SNM uranium fuels recovery plant.
- Worked on safety and quality aspects of conceptual design for projects to de-convert highly enriched uranium (HEA) to low enriched uranium (LEU).
- When the company moved into consulting activities supported SNM license procedure development and implementation for Sequoyah Fuels Corporation (Gore, Oklahoma).
- Managed the safety assessment reports for the Department of Energy (DOE) MHTGR Tritium Target Fabrication Project.

October 1983 to April 1986: **Senior Industrial Hygienist/Safety Professional**, Monsanto Electronic Materials Company, Spartanburg, South Carolina.

- Work responsibilities included chemical hazards safety, industrial hygiene monitoring, equipment safety analysis, safety training, scaffolding and fall protection, forklifts, trenching/shoring, hearing conservation, ergonomics, asbestos, lead, laser safety, toxicology, workman's compensation, Responsible Care implementation, and emergency preparedness/disaster planning for a silicon wafer foundry electronics manufacturing plant.
- Facility given OSHA VPP Star status and awarded outstanding safety program in South Carolina.

December 1979 to October 1983: **Senior Industrial Hygienist/Safety Professional**, Monsanto Chemical Company, Nitro, West Virginia.

- Work responsibilities included chemical hazards safety, industrial hygiene monitoring, equipment safety analysis, safety training, hearing conservation, forklifts, scaffolding and fall protection, trenching/shoring, asbestos, lead, ergonomics, Workman's Compensation, OSHA VPP, Responsible Care implementation, chemical tank storage, and emergency preparedness/disaster planning for an intermediate chemical manufacturing plant (rubber chemicals, agriculture chemicals, etc.).

- Participated in numerous legal and governmental regulatory projects, due to the fact that the plant use to make 2,4,5 T (the component of Agent Orange containing dioxin contamination), handled PAB (a potent human bladder carcinogen), and was involved in lawsuits totaling over 2 billion dollars.
- In addition, the plant site was located in the same area as the Union Carbide plant that was responsible for the problems in Bophal, India (we safety handled many of the same hazardous materials).

January 1977 to April 1977: **Instructor**, Saginaw Valley State College, University Center, Michigan.

- Taught Genetics, Biological Sciences, and laboratory courses.

August 1975 to June 1976: **Instructor**, Charles Mott Community College, Flint, Michigan.

- Taught Biology, Zoology, and laboratory courses.

ORGANIZATIONS/HONORS:

American Industrial Hygiene Association (AIHA) - local and national

American Society of Safety Engineers (ASSE) - local and national

American Board of Industrial Hygiene (ABIH)

National Fire Protection Association (NFPA)

American Public Health Association (APHA)

On for Cal-OSHA Advisory Committee for Occupational Safety and Health Standards

Extensive radiological and health physics training

Extensive project management and statistical/quality assurance training

SEMI industrial hygiene and safety standards groups

Awards/citations from the Department of Energy (DOE) – 3 years

College/high school wrestling team captain and four-year athletic scholarship

Awarded NIOSH college graduate school traineeship and stipend

Eagle Scout

Hang Gliding