



M.H. Chew & Associates, Inc.
Environmental, Safety and Health
Engineering, Radiation Protection and Nuclear Safety

Corporate Profile

The needs and requirements of modern nuclear operations demand sophisticated capabilities in the areas of radiological protection and health physics, compliance assessments, radiological engineering, occupational safety, industrial hygiene, nuclear shielding analysis, and other support services. M.H. Chew & Associates, Inc. (CAI) is a professional consulting firm specializing in these and other scientific and technical services. For over 30 years, CAI has grown from a small, localized firm to a national organization that can support a large number of concurrent projects using highly qualified personnel with specialized capabilities and credentials. We have been providing radiation safety and other scientific consulting services to the U.S. Department of Energy (DOE), its National Laboratories and prime contractors and other government agencies including the National Institute for Occupational Safety and Health (NIOSH). Our staff includes two former presidents of the Health Physics Society, Certified Health Physicists (CHP), Certified Industrial Hygienists (CIH), other disciplined engineers including radiological engineers, nuclear engineers, chemists, physicists and mathematicians. Many of our staff maintain active DOE "Q" clearances. Along with the company's established reputation in providing scientific consulting services, we have added a corporate emphasis in providing contracted labor of highly skilled technical professionals to support major programs and projects. We specialize in providing placement services in the nuclear (generating and non-generating), environmental, refining and utility industries on a temporary, temp-to-hire, or direct placement basis.

Business Classification/Status

- Small Disadvantaged Minority-Owned Business
- NAICS Codes 541330, 541620, 541690, 541990, 541712, 561320
- FOCI Facility Code – 3940
- DUNS: 36-1498884
- ISO 9001 QA Program

Technical Expertise

- Radiological protection and health physics (10 CFR 835)
- Radiation exposure, dose & effects assessment
- Historical dose evaluation and reconstruction
- Radiological release, transport and pathways analysis
- Ecological effects of low dose radiation exposure
- Medical radiological exposure
- Radiation emergency response
- Neutron, alpha, and gamma exposure analysis
- Naturally occurring radioactive material (NORM)
- Technically enhanced NORM (TENORM)
- Industrial hygiene and toxicology
- Occupational safety and health
- Fire protection and hazards/risk analysis
- Operational Safety
- Nuclear criticality prevention and safety
- Shielding calculations and design
- DOELAP
- MARSSIM
- Compliance assessments
- ALARA
- Technical Basis Document (TBD) development
- Dosimetry

Other Services

- Monte Carlo N-Particle code analysis (MCNP)
- Residual Radioactivity analysis (RESRAD)
- RADQALC® QA Software analysis
- Waste site evaluation and remediation
- Safeguards and security
- Threat/vulnerability assessments
- Nuclear Incident Response Program (NIRP) support including, emergency preparedness/response/training
- Radiation transport modeling using the Attila® modeling suite which includes SpaceClaim®, Attila, MCNP6®, and Tecplot 360™
- Calorimetry and waste management
- Development and use of counting techniques

Staff Augmentation

- Engineers (all disciplines)
- Finite element analysis (including STADD PRO, GTstrudl, ANSYS, SAP2000, Compress)
- Natural Phenomenon Hazards analysis (DOE-STD- 1020-2002 & 2012)
- Pipe stress/pipe support (B31.1, AISC, ASCE, ASME)
- HVAC, Load, pressure drop, equipment sizing analysis
- Electrical analysis (including Dapper, Captor, Hi-Wave, TMS, A-Fault)
- Process Flow Diagrams (PFDs), Piping and Instrumentation Diagrams (P&IDs)
- Fire Protection (NFPA Codes, DOE-STD-1066-99, DOE-Order-420.1b)
- Designers, (including, 2-D and 3-D MicroStation, AutoCad, ProE, PDS, SolidWorks, InRoads, PlantSpace, EE Raceway, HydraCad, HASS)
- Environmental, Safety & Health (CHP/CIH/CSP)
- Project controls/cost engineers/earned value
- Quality assurance/NQA-1 Lead Auditors

Authorization Basis Support

- Preliminary hazard analysis
- Documented Safety analysis
- Process safety analysis
- Unreviewed safety question determinations (USQD)
- Technical safety requirements (TSR)

Contact Information

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