

Nuclear Waste Technology Group



Analytical Services

Operational nuclear facilities and legacy reprocessing sites have unique engineering challenges to address. Safe and efficient handling of nuclear and contaminated materials can require innovative technical solutions without which a basic engineering task can appear very complicated.

Fauske and Associates, LLC (FAI) has more than 35 years of analytical, field and laboratory experience supporting complicated engineering projects. Our comprehensive analytical solutions address all project aspects from fundamental process and safety evaluations to efficiency and technical basis justification.



Areas of Expertise

- Aerosol Physics
- Chemical Reaction Rates
- Criticality
- Emergency Response
- Engineered Basis
- Explosions
- FATE Software
- Fire Modeling
- Flammability & Combustion
- Full Service (Analytical, Field Service & Laboratory)
- Integrated Process Evaluation
- Hydrogen Generation
- Radioactive Gas Transport
- Radiolysis
- Source Terms
- Thermal-Hydraulics

Previous Projects

• Sludge Transport and Storage Container

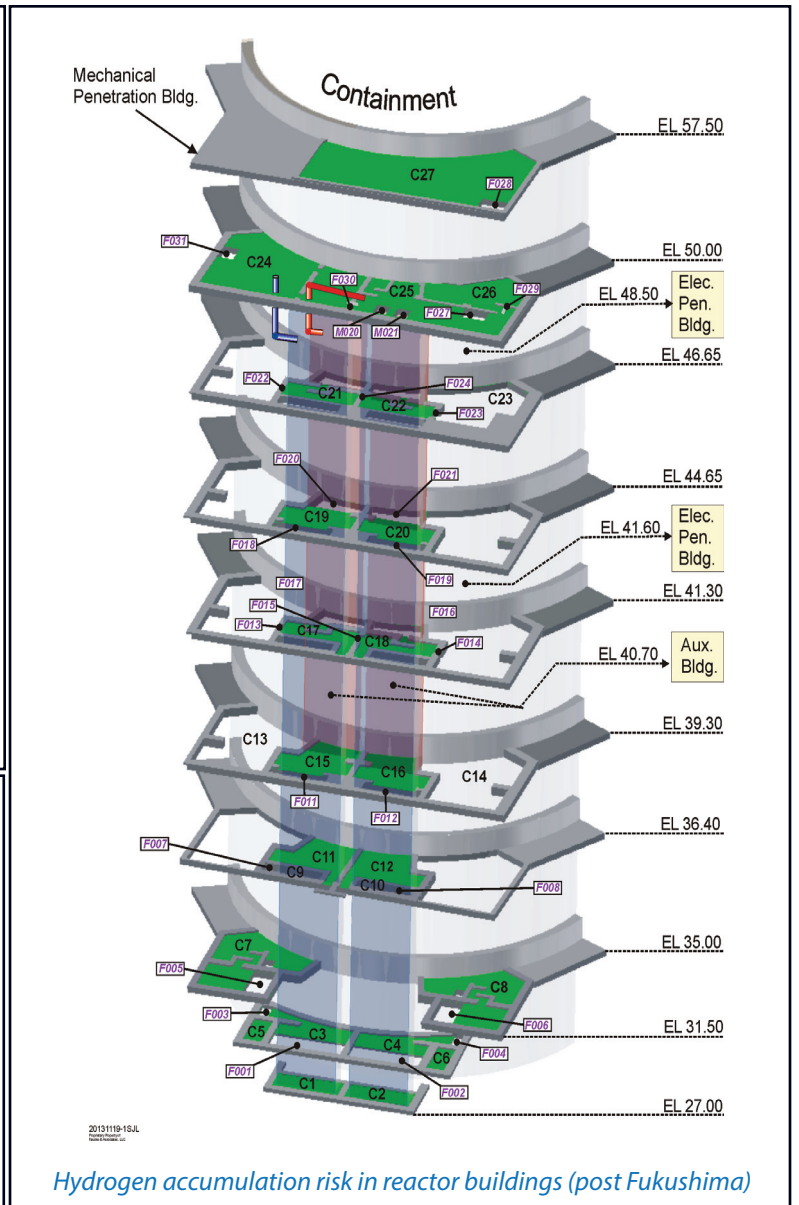
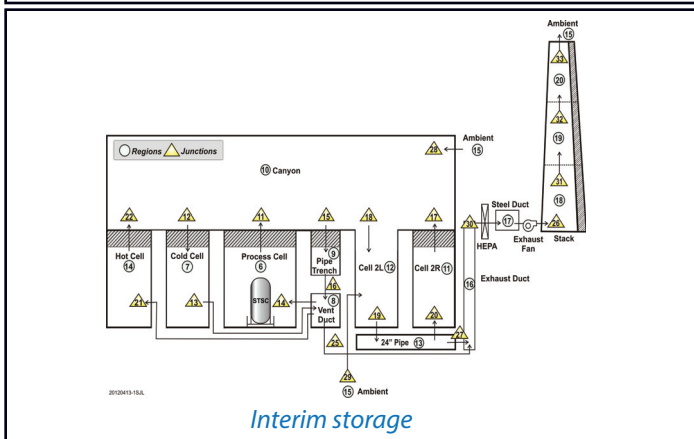
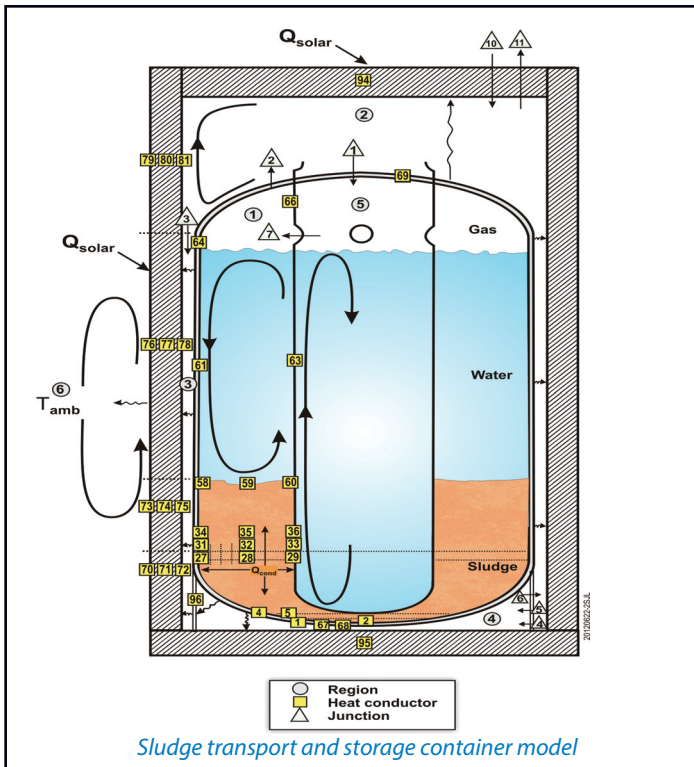
Developed and performed heat generation and heat transfer of a storage container containing radioactive sludge. Evaluations included the potential for criticality, hydrogen generation rates and proper vent sizing requirements. In addition a safety evaluation was performed to assess the developed new technology.

• Interim Fuel Storage Integrated Evaluation

Fully integrated engineering evaluation of an interim storage facility. Evaluations included hydrogen generation, gaseous transport along with postulated off-site releases.

• Hydrogen Accumulation - Post Fukushima

FAI played a key role in the evaluation of the Fukushima accident including analyses of the accumulation of hydrogen in the reactor buildings.



Benefits

Recognized as proven experts, FAI offers our customers both expertise and experience to effectively generate solutions to complex engineering problems. By coupling our analytical, field service and laboratory capabilities together, FAI can provide full service solutions.

With more than 35 years of success servicing the nuclear and chemical industries, we have acquired broad expertise and continued our education process to support complex engineering problems. We welcome First Of A Kind (FOAK) projects and regularly think outside of the box.

The following is an abbreviated list of the customers we have been fortunate enough to service.

- Hanford Site
- Savannah River Site
- UK's Sellafield Site
- Sandia National Lab
- Numerous operating & closed commercial nuclear power generation plants