



Engineering & Consulting

Sandia provides a multi-disciplinary, team-based consulting approach with innovative engineered solutions for clients in industrial settings for waste water management. An integrated project management and problem-solving approach is offered with initial technical review to minimize risk and uncertainty, followed by development of options and solutions with the best chance of success.

The company is an expert in regulatory affairs pertaining to Class I, II, III, V and proposed Class VI injection wells and possesses an extensive knowledge of state and federal regulations. We utilize this knowledge base to provide an engineered solution and a specific consulting response. State and Federal Permits are prepared incorporating all requirements necessary under UIC regulatory rules, in a format that is acceptable to regulators.

Geological evaluation of subsurface formations is utilized to provide the foundation and basis for modeling and engineered well designs that optimize injection reservoirs. All subsurface evaluation is compiled using digital base maps, allowing for faster manipulation and revision. Reservoir modeling is then performed once the geology of the subsurface has been mapped, defined, and interpreted. Conservative model inputs are used to bound model results.



Front end engineering design (FEED) studies are prepared by Sandia's professional engineers, offering optimized injection well solutions. FEED involves an evaluation and review of well materials compatibility and integration of key geologic formation data to select the best technological approach for well installation and completion design. The selection of well tubulars and surface piping materials are based upon evaluation of compatibility with the fluid to be injected and well life-cycle requirements.

Our engineers have unique experience in petroleum wells, waste injection wells, water wells, storage wells, and CO₂ sequestration wells. Sandia also provides out-of-the box thinking and response to well reliability issues utilizing its considerable experience in well workovers, intervention, and re-completion technology.

Typical consulting projects range from subsurface geologic feasibility studies, injection well permitting, regulatory compliance, and development of monitoring programs, to field projects such as: well drilling, completions, re-completions, workovers, diagnostic testing, and restoration of wellbore integrity.

- Feasibility studies for green field and expansion sites
- Well permitting, no-migration petitions, and regulatory reviews
- Design, drill, and complete Class I, II, V injection wells
- Subsurface geological mapping and reservoir evaluation
- Reservoir modeling and injection flow analysis
- Injectivity analysis, well optimization and enhancement
- Well integrity studies and wellbore diagnostic evaluations
- Perform field studies for petroleum and gas storage sites
- Underground gas storage and enhanced oil recovery

**Let us provide a consultation and discuss your project needs.
Please call 832.286.0471 or email us at info@sandiatech.com.**