

Geologic Sequestration of Carbon Dioxide Evaluation and Class VI Underground Injection Control Permit Application

Central Valley, California

CLIENT

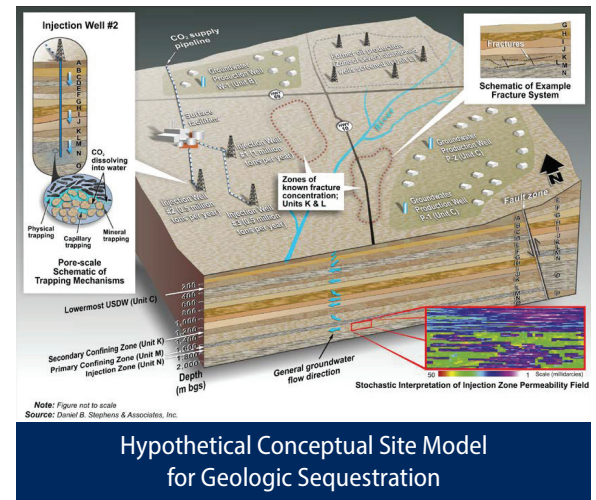
San Joaquin
Renewables, LLC

HIGHLIGHTS

- Evaluated potential for geologic sequestration of carbon dioxide
- Prepared the submittal of a Class VI permit application to U.S. EPA
- Developing CARB LCFS certification

DBS&A is supporting San Joaquin Renewables, LLC, with one of the first planned geologic sequestration carbon storage projects in California.

DBS&A initially performed a screening-level study to evaluate potential for geologic sequestration of carbon dioxide at the proposed site in the Central Valley of California. San Joaquin Renewables will build, own, and operate a facility in McFarland, California, that will convert agricultural waste biomass into about 80,000 gasoline gallon-equivalents of natural gas (RNG) per day. The RNG will be transported by SoCalGas pipelines to be used as vehicle fuel throughout California. Feedstock used in the plant will consist of agricultural wood waste, pistachio shells, and almond shells. The project is expected to be complete 18 months after construction begins.



DBS&A prepared the submittal of a Class VI permit application to U.S. Environmental Protection Agency (U.S. EPA). This included:

- Initial screening evaluation to advise the client if their proposed site was likely suitable for geologic carbon storage based on the presence of a deep injection zone that will be able to accept and store the injected carbon dioxide and a confining zone that will restrict upwards movement, among other factors
- Comprehensive regional and local project site characterization for injection suitability and stability
- Coordination and consultation with U.S. EPA staff at Region 9 and Headquarters to ensure that the permit application is consistent with requirements
- Development of an U.S. EPA Underground Injection Control (UIC) Class VI permit application, which included extensive site characterization, modeling, laboratory core testing, data analysis, and cost evaluation that is summarized in a set of eight reports and accompanying supporting material and submitted to U.S. EPA
- Review of California Air Resources Board (CARB) Low Carbon Fuel Standard (LCFS) requirements for carbon dioxide injection to ensure the project will be able to obtain LCFS certification

DBS&A was asked to support San Joaquin Renewables in development of an application for CARB LCFS Certification. DBS&A has developed a plan to prepare required materials for certification, including making use of previously developed materials for the Class VI permit application. Preparation of the CARB submittals is ongoing.