

STEPHANIE HILL

Education

BS Geological Sciences/Hydrogeology, University of Texas,
Austin, Texas, 2000



Licensure

Professional Geologist/Geoscientist:

Florida	PG3074
Illinois	196001486
Texas	15069

Professional Affiliations

Groundwater Protection Council
American Association of Petroleum Geologists

Professional Experience

Stephanie Hill is a program leader for SCS Engineers' Carbon Sequestration and Deep Well Injection practice, hydrogeologist, and licensed Professional Geologist in Texas, Florida, and Illinois. She earned a BS in Geosciences with an emphasis in hydrogeology and geomorphology at the University of Texas. Ms. Hill's early career focused on environmental compliance for mineral and fossil fuel industries at the Texas Commission on Environmental Quality (1996 to 2000) and the Railroad Commission of Texas (2000 to 2012). Since joining SCS in 2013, she co-leads a team of scientists and engineers to advise clients of various industries on geologic storage options for carbon neutrality and disposal of industrial liquid residuals. Examples of her project experience follow:

Carbon Sequestration

Confidential Clients: Texas, California, Louisiana

Leads multi-disciplinary teams in siting, permitting, designing, and installation oversight. Coordinates data interpretation, site screening potential, project interference assessment, regulatory discussions, and application preparation for full-scale individual or commercial deployment of carbon sequestration through Class VI underground injection control (UIC) injection wells. Facilitates discussions between carbon asset developers, industries seeking carbon neutrality options, tax equities advisors, and grant providers.

Wastewater Disposal through Underground Injection Control

Prairie State Generating Company, Washington County, Illinois
Hamilton County Coal LLC, Mine No. 1, Hamilton County, Illinois
Foresight Energy, Sugar Camp Mine, Franklin County, Illinois
Countyline Corporate Park, Hialeah, Florida

Directs the preparation of Class I UIC permit applications for federal and state regulatory agencies, including siting, designing and coordinating installation and workover activities. Optimizes operation of existing injection wells and coordinates construction oversight.

Various Clients: Illinois, Florida. Developed work plans for and oversaw compliance testing of Class I injection wells, including internal and external mechanical integrity tests, ambient pressure fall-off tests, and video, caliper, and radioactive tracer surveys. Prepared regulatory reports.

Various Clients: Florida, Illinois, Kentucky, Louisiana, Texas . Led preparation of studies to assess the feasibility of Class I injection wells by evaluating the geologic sufficiency and regional regulatory programmatic support.

Storm Water Management

Consulted on the design and construction of numerous mining-related sedimentation ponds and diversions to capture and treat mine-water runoff prior to offsite discharge. Assisted in the development of NPDES/TPDES permits for coal mining industry for Texas Commission on Environmental Quality. Developed and implemented surface water and groundwater monitoring plans for coal mines to establish baseline conditions, monitor active and post-mine water impacts and developed remediation plans. Established appropriate and cost-effective best management practices based on soils, hydrology, slope, permanence and aesthetics. Evaluated effectiveness of various water and erosion control best management practices using various software packages. Assisted in the development of Surface Water Pollution Prevention Plans and site specific erosion control plans. Facilitated relocation and restoration of stream channels through and around mine-impacted lands.

Hazardous Waste Management

Performed site assistance visits to small businesses (various industry types) with follow-up reports with solutions prepared and presented to company management for purposes of achieving environmental compliance. Provided bi-yearly pollution prevention training to small businesses offering up-to-date solutions for environmental concerns; established clearinghouse for purchase of industry waste streams.

Class Action Litigation

Luminant Mining Company, LLC, Leesburg Mine, Permit No. 51, Camp County, Texas. Served as expert witness (permit review coordinator) for State of Texas on review of new permit application by multi-disciplinary team. Testified on behalf of Railroad Commission of Texas permitting review for compliance with environmental Regulations.

Dos Repúblicas Coal Partnership, Eagle Pass Mine, Permit No. 42, Maverick County, Texas. Served as expert witness on review of permit renewal application, testifying on overall team review for compliance of Regulations, team credential defense and portions of hydrology.

Environmental Management and Compliance

Participated in a work group centered on efficient management and disposal of coal combustion residuals at state-regulated surface coal mines in compliance with the United States Environmental Protection Agency's draft rules (pre-published version released on December 19, 2014). Worked with the Office of Surface Mining and Reclamation Enforcement and Interstate Mining Compact Commission to develop disposal processes and responsible regulation based on draft rules.

Conducted investigations of acidic seeps from post-mine reclamation soils; acted as consultant to provide long-term and short-term remediation solutions (anoxic lime drains and total submersion via ponds). Participated in work groups with federal oversight (Office of Surface Mining and Reclamation Enforcement) for permanent solution.

Consulted with mine industry to identify administrative/environmental/logistical components of proposed mines prior to application of requisite permits (baseline environmental conditions, proposed detailed mine and reclamation plans, determination of forfeiture bonds, identification of owners/controllers).

Technical Presentations

Texas Commission on Environmental Quality (formerly Texas Natural Resources Conservation Commission) “Pollution Prevention Training for Small Businesses” Various locations throughout Texas, 1996-2000

Office of Surface Mining and Reclamation Enforcement (via Department of the Interior), “Intergovernmental Benchmarking Workshop on Probable Hydrologic Consequences Determinations and Cumulative Hydrologic Impact Assessments (PHC/CHIA)” New Orleans, LA, 2002

Office of Surface Mining and Reclamation Enforcement (via Department of the Interior), “Annual Meeting; National Pollutant Discharge Elimination System Point Source Collection vs. Texas Pollutant Discharge Elimination System Composite Sampling” St. Louis, MO, 2009

Groundwater Protection Council, Annual Forum “Geologic Suitability of Class I Injection Wells in the Deeper Portions of the Illinois Basin” Oklahoma City, OK, 2015

National Groundwater Association, Groundwater Summit “Geologic Suitability of Class I Injection Wells in the Deeper Portions of the Illinois Basin” Denver, CO, 2016

Chemical Industry Council of Illinois, Brown Bag Luncheon “Deep Well Injection, An Illinois Water Management Option” St. Louis, MO, 2016

SCS Engineers, Liquids Management Strategic Initiative Breakout Session “Deep Well Injection, A Viable Liquids Management Option” Baltimore, MD, 2017

Missouri Waste Control Coalition, Annual Meeting “Geochemical Evaluation for Reduction of Scaling in Landfill Leachate Collection Systems” Osage Beach, MO, 2018

Groundwater Protection Council, UIL Conference “Innovative Annulus Monitoring and Control Design for High Pressure Class I Wells” San Antonio, TX, 2018

Missouri Waste Control Coalition, Annual Meeting “Injection Wells for Responsible Leachate Management” Osage Beach, MO, 2019

Groundwater Protection Council, Annual Conference “Microbially Influenced Corrosion in Injection Wells” Salt Lake City, MO, 2022

Various webinars related to underground injection control practices published between 2022 through 2024: <https://www.scsengineers.com/news/videos/clean-air-and-greenhouse-gas-reduction/>