



MATTHEW MURRAY
Geologist

Education: BS, Earth and Environmental Science Geology, University of Texas at San Antonio, TX, 2005

Marketing, Mesa College, San Diego, CA, 2003

Years of Relevant Experience: 11

Responsibilities: Project Geologist

Project oversight for environmental/construction service projects which include drilling, well installations, ERH Electrode installations, soil/groundwater sampling activities, and waste management. As the site geologist/superintendent his responsibilities include all aspects of construction oversight, QA/QC, and site management.

Summary of Experience:

Mr. Murray provides quality control support for field projects. Mr. Murray has excellent organizational abilities, strong communication skills, and is proficient in needed computer programs. His geology background enables him to support field efforts in diverse locations. He has installed over **350 ERH Electrodes** of various complexities and has first-hand knowledge of all operational aspects of the ERH technology.

Relevant Experience:

Project Geologist for Air Force Center for Engineering and the Environment (AFCEE), Site S-1 ERH Project at The Former Kelly AFB, San Antonio, Texas. (January 2009-2011). The project consisted of the installation of **64 ERH electrodes** and vapor recovery wells with the designed intent for conductive heating of the area soils, volatilization of contaminants, and condensate recovery from the solvent-impacted soil. The installation was performed on a one acre site with electrode wells installed both in the interior of a building and the surrounding the building footprint. The system components included the ERH power control unit with a dedicated computer and data acquisition software, vapor recovery blowers and conveyance piping, manifold carbon adsorption units, and ERH electrical system controls. His Remedial activities included the installation, start-up, and operation of the ERH system. Mr. Murray's responsibilities also included collection of confirmation samples and interpretation of analytical results to demonstrate contaminant reduction.

Project Geologist, for the Air Force Center for Engineering and the Environment (AFCEE), Environmental Services at the Central Regional Bases, (August 2009 – 2012). Project oversight for multiple environmental/construction service projects, including work performed by AFCEE and AFRPA.

Mr. Murray was the Project Geologist for the Corrective Measures Implementation (CMI) Phase I and II at solid waste management units located at Former Kelly AFB, San Antonio, Texas. His responsibilities included obtaining all necessary federal, state and local permits; performing all field oversight during the remedial action period at multiple locations designated by the Air Force Center for Environmental Excellence (AFCEE) and the Air Force Base Conversion Agency (AFBCA).

Phase I activities included the directional drilling and forward reaming installation of three (750 foot long) horizontal SVE wells beneath an active engine maintenance facility to address chlorinated solvent contamination.

Phase II remedial activities included: the installation of **218 ERH electrodes** (June 2006 -2009) and vapor recovery wells with the designed intent for conductive heating of the area soils and groundwater, volatilization of contaminants, and condensate recovery from the solvent-impacted soil. The system components included a ERH power control unit with a dedicated computer and data acquisition software, vapor recovery blowers and conveyance piping, manifold carbon adsorption units, ERH electrical system controls. His Remedial activities included the start-up and operation of the ERH system, as well as collection of confirmation samples to demonstrate contaminate reduction to the targeted Risk Reduction Standard #2.

Project Geologist, U.S. Army Corps of Engineers (USACE), Lackland AFB, San Antonio, TX (June 2007 – 2012). Mr. Murray's responsibilities for this Long-Term Management and Remedial Action Operation project include the review of available historic chemical data for three groundwater plumes and the development of site specific sampling strategies for the evaluation of monitored natural attenuation (MNA).

Professional / Educational Affiliations:

Member, Geological Society of America
Member, South Texas Geological Society
Senior Member, NeoGeo's San Antonio, TX
UTSA Alumni Association Life Member
Member, San Antonio Petroleum Club
University of Texas Student Geological Society (President 2004-2005)

Certifications:

40-Hour Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HazWOPER) Training, 2007
8-Hour OSHA HazWOPER Refresher Training, 2012
30-Hour OSHA Construction Safety and Health Training, 2009
U.S. Corps of Engineers Construction Quality Management for Contractors, March 2007
Department of Transportation Hazmat Training, 2007
Confined Space Training, 2008
Safety Leadership Training for Supervisors, 2009
First Aid, 2013
CPR, 2013