



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CROW BUTTE RESOURCES, INC.

(Marsland Expansion Area)

Docket No. 40-8943-MLA-2

ASLBP No. 13-926-01-MLA-BD01

Hearing Exhibit

Exhibit Number: NRC004

Exhibit Title: Statement of Professional Qualifications of Elise Striz (Aug. 17, 2018)

Elise A. Striz, Ph.D
Statement of Professional Qualifications

EDUCATION University of Oklahoma
Norman, Oklahoma
Ph.D. – May 1998
Major: Petroleum Engineering

University of Oklahoma
Norman, Oklahoma
M.S. – May 1985
Major: Civil Engineering

Purdue University
West Lafayette, IN
B.S. – May 1981
Major: Interdisciplinary Engineering (Environmental)

WORK EXPERIENCE

Mar. 2008 – Present

Hydrogeologist, GG-14, Uranium Recovery Branch (URB), NMSS, US NRC, Rockville, MD.

- Perform technical safety reviews and assist with environmental reviews of licensing actions for uranium recovery operations using in-situ leach or conventional milling, with emphasis on the evaluation of site geological, surface water and ground water conditions, impacts of operations on these resources and protection/restoration of these resources.
- Conduct operational oversight of uranium recovery facilities including on-site inspections and reviews of required monitoring reports.
- Develop and evaluate ground water flow and contaminant transport models to support technical reviews of uranium recovery sites.
- Provide technical expertise on geological, surface water and ground water hydrology to NRC and other government and non-government entities, including the International Atomic Energy Agency (IAEA), for uranium recovery sites.
- Act as technical subject matter expert on geological, surface water and ground water hydrology to provide written and oral testimony for hearings on uranium recovery licensing actions.

Apr. 2007 – Mar. 2008

Hydrogeologist, GG-13, Uranium Recovery and Licensing Branch (URLB), FSME, US NRC, Rockville, MD.

- Performed technical reviews of ground water site characterization, flow and transport modeling, restoration, and monitoring for new license applications and other licensing

actions for in-situ uranium recovery (ISR) facilities, UMTRCA Title I and Title II sites and other uranium decommissioning sites.

- Performed inspections of existing and proposed ISR operations.
- Provided expertise on ISR operations in complex hydrogeological settings.
- Assessed and researched novel ground water restoration techniques at ISR sites.

Nov. 2006 – Apr. 2007

Supervisory Environmental Scientist , GS-14

Acting Branch Chief, US EPA ORD NRMRL Ground Water & Ecosystems Restoration Division, Ecosystems and Subsurface Protection Branch, Ada, OK

- Acted for four months as Branch Chief in addition to regular research work load.
- Supervised eight research staff and two field technicians and completed other management tasks to support research mission of the branch.

Feb. 2001 – Nov. 2006

Hydrologist, GS-13, US EPA ORD NRMRL Ground Water & Ecosystems Restoration Division, Ecosystems and Subsurface Protection Branch, Ada, OK

- Performed field research on contamination to ground water from confined animal feeding operation waste land application sites and on ground water/surface water interaction before and after stream restoration.
- Developed and calibrated research site ground water flow/contaminant transport models using field data.
- Created, reviewed and tested algorithms and software codes for a new EPA ground water model and coauthored user manual.
- Prepared and published journal articles and technical reports describing the results and implications of research efforts.

Jun. 1998 – Feb. 2001

Supervisor and Project Scientist, ManTech Environmental Research Services, Ada, OK

- Supervised, managed and acted as member of the USEPA Center for Subsurface Modeling Support (CSMoS), an on-site contract team composed of two ground water modelers, one database programmer, one geologist and two GIS specialists providing ground water and contamination remediation modeling technical support for US EPA.
- Performed reviews of ground water site characterization and ground water modeling reports for RCRA and Superfund sites.
- Reviewed and developed ground water models and software to support contract mission

PROFESSIONAL AFFILIATIONS

Society of Petroleum Engineers (SPE)

Member 1992- present

PUBLICATIONS

1. Mayer, P.M, Groffman, P.M. Striz, E., Kaushal S.S., 2010. Nitrogen Dynamics at the Ground water-Surface Water Interface of a Degraded Urban Stream, J. Environ. Qual. 39: 810-823.
2. Frans, L., Paulson, A., Richerson, P., Striz, E., and Black, C., 2009, Evaluation of sources of nitrate beneath food processing wastewater-application sites near Umatilla, Oregon: U.S. Geological Survey Scientific Investigations Report 2009-5069, 14 p.
3. Striz, E.A. and Mayer, P.M., 2008. Assessment of Spatial and Temporal Variation in Ground Water- Surface Water Interaction (GSI) of a Degraded Stream before Restoration. EPA 600/R-07/058, August 2008.
4. Kaushal, S.S., Groffman, P. M., Mayer, P.M., Striz, E., Gold, A.J., 2008. Effects of Stream Restoration on Denitrification in an Urbanizing Watershed, Ecological Applications: Vol. 18, No. 3, pp. 789-804.
5. Doheny, E.J., Starstoneck, R.J., Mayer, P. M. and Striz, E., 2007. Pre-Restoration Geomorphic Characteristics of Minebank Run, Baltimore County, Maryland, 2002-04, USGS Scientific Investigations Report 2007-5127.
6. Doheny, E.J., Starstoneck, R.J., Striz, E.A., and Mayer, P.M. 2006. Watershed characteristics and pre-restoration surface-water hydrology of Minebank Run, Baltimore County, Maryland, Water Years 2002-04. USGS Scientific Investigations Report 2006-5179, 42pp.
7. Srinivasan, P., Pope D., and Striz, E., 2004. Optimal Well Locator (OWL), A Screening Tool for Evaluating Locations of Monitoring Wells, Users Guide and Software, EPA 600/C-04/017, March 2004.
8. Striz, E.A., and Wiggins, M.L., 2002. A Coupled Model to Predict Interformation Flow through an Abandoned Wellbore, SPE Journal of Production and Facilities, Feb. 2002, pp. 11-22.