

APPENDIX D
Draft EA Preparer and Reviewer Resumes

DRAFT

F. RUSSELL PICKERING, MS

SENIOR ENVIRONMENTAL PROJECT MANAGER

PROFESSIONAL EXPERIENCE

Mr. Pickering is a Senior Project Manager in the Environmental Department of Terracon's Denver, Colorado office and has more than 14 years of experience in managing and providing a range of environmental services to a variety of clients. Mr. Pickering's principal work is focused in the oil and gas industry providing project management for Due Diligence, Limited Site Investigations, and NEPA investigations. Mr. Pickering also conducts Phase I and Phase II ESAs and provides assistance in remedial system design and business development. Russell has extensive experience in wetland delineation, wetland mitigation planning, and is certified by the U.S. Fish and Wildlife Service to conduct threatened and endangered species surveys in support of a variety of Terracon projects.

PROJECT EXPERIENCE

- **Limited Site Investigations, Oil and Gas Clients – Larimer and Weld Counties, CO**

Conducted investigations to determine the vertical and lateral extent of condensate and other petroleum related contamination plumes at numerous production facilities located along the Front Range of Colorado. Projects included soil and groundwater sampling, monitoring well installations, plume modelling, remediation planning and oversight, and agency coordination.

- **Environmental Impact Statement, Jonah II Gas Field – Southwest Wyoming**

Examined the effects of gas field development under the proposed action and several alternatives on the environment for a third-party EIS produced for the Bureau of Land Management. Principle issues evaluated included critical wildlife habitat and migration routes, noise, traffic, air quality, surface water, wetlands, and visual impacts.

- **Wetland/Threatened and Endangered Species Habitat Mitigation Plan, Monument Creek Bank Stabilization Project – Colorado Springs, CO**

Managed a complex project dealing with an enforcement action by the Environmental Protection Agency, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service based on unpermitted construction activities within the 100 year flood plain of Monument Creek. Activities included working with an integrated team of lawyers, engineers, and biologists to provide guidance to the client regarding regulatory agency required mitigation activities. Field studies centered on wetland and threatened and endangered species habitat destruction and mitigation planning.

- **Surfactant Enhanced Electrokinetic Remediation of Petroleum Contaminated Fine Grained Soils – Laramie, WY**

Designed and implemented a system to remove residual petroleum contamination from clay soils which had proven resistant to traditional remediation methods. The system involved the application of a direct current to the subsurface through an electrode array and the introduction of anionic surfactants to enhance contaminant mobilization.

EDUCATION

Masters of Science, Environmental Engineering, 2006, University of Wyoming

Masters of Science, Fishery and Wildlife Biology, 1994, Colorado State University

Bachelor of Science, Zoology/Physiology, 1992, University of Wyoming

CERTIFICATIONS

SFWS Certification for Threatened & Endangered Species Surveys

Certified Wetland Delineator

40-Hour OSHA Hazwoper Certification

8-Hour OSHA refresher courses

WORK HISTORY

Terracon Consultants, Inc., Sr. Project Manager, 2006 – Present

Aspen Environmental Services, Principal, 1997-2006

TRC Mariah Associates, Environmental Scientist, 1994-1997

PROJECT EXPERIENCE (continued)

- **Environmental Protection Planning, South Platte River Restoration – Denver, CO**
 Prepared guidance documents including Spill Prevention, Control, and Countermeasure Plan, Stormwater Pollution Prevention Plan, Erosion Control Plan, Section 404 of the Clean Water Act Permit, Traffic Control Plan, Environmental Protection Training, Contaminant Prevention Plan, and Natural and Cultural Resource Management Plan.
- **EIS Windpower Project – Arlington, WY**
 Worked as part of an integrated team to evaluate potential impacts to the environment resulting from the construction and operation of a large windpower project. Critical issues focused on cultural resources and impacts to wildlife, particularly raptor species.
- **NEPA Environmental Assessment, U.S. Army Corps of Engineers and U.S. Border Patrol – El Paso, TX**
 Managed a NEPA EA for the improvement and replacement of fence and road structures along a 15 mile stretch of the United States/Mexico border. The project included assessments of wildlife, threatened and endangered species, cultural resources, noise and visual impacts, air quality, socioeconomics, traffic, and environmental justice.
- **Environmental Due Diligence Audit, Cannon AFB, Former Roswell Industrial Air Field – Roswell, NM**
 Conducted an Environmental Due Diligence Audit of a World War II air field in New Mexico. The study focused on the identification of recognized environmental conditions including unexploded ordinance, fuel storage, poly-chlorinated biphenyl containing equipment, lead paint, and asbestos containing materials.
- **NEPA Environmental Assessment, Ft. Bliss, Gunnery Range – El Paso, TX**
 Conducted an EA to assess the effects of decommissioning an existing tank training area and the installation of a new training grounds. Critical issues included unexploded ordinance clearance at the site to be closed and air quality, noise, and visual impacts along with environmental justice at the proposed new site.

ADDITIONAL COURSES

Engineering Applications of GIS and GPS, Colorado State University, Ft. Collins, CO

Ecological Risk Assessment and Management, Colorado State University, Ft. Collins, CO

Wetland Delineation and Mitigation Planning, Wetlands Training Institute, Kalispell, MT

Technical Writing and Peer Reviewing, Laramie, WY

PUBLICATIONS/PRESENTATIONS

Pickering, R., "Surfactant enhanced electrokinetic remediation of petroleum contaminated fine-grained soils" MS Thesis, Department of Civil and Architectural Engineering, University of Wyoming, 2006.

Pickering, R., "Relative importance of dietary versus aqueous exposures to copper, cadmium, lead, and zinc in Rainbow Trout (*Oncorhynchus mykiss*)". MS Thesis, Department of Fisheries and Wildlife Biology, Colorado State University, 1995.

Seville, R.S., D. Thomas, R. Pickering, and N. Stanton. "Species of *Eimeria* from the thirteen-lined ground squirrel, *Spermophilus tridecemlineatus*, from Wyoming". Great Basin Naturalist 52:309-312, 1992.

JANINE MUSHOCK
STAFF ENVIRONMENTAL SCIENTIST



PROFESSIONAL EXPERIENCE

Ms. Mushock is a staff environmental scientist in Terracon's Fort Collins, Colorado, office. She has conducted Phase I Environmental Site Assessments (ESA) for property transfers in Colorado and Wyoming. Ms. Mushock has also conducted subsurface groundwater and soil sampling and has assembled Spill Prevention Control and Countermeasure (SPCC) plans for agricultural and natural gas pipeline facilities. She is certified in the State of Colorado as an asbestos building inspector and has provided administrative and environmental support to the Fort Collins, Billings, Cheyenne, Casper, Colorado Springs and Rock Springs Terracon offices.

PROJECT EXPERIENCE

- **Phase I Environmental Site Assessments for Property Transfer**
Conducted environmental site assessments for large tracts of undeveloped property, agricultural parcels, residential, and commercial areas.

Performed Phase I ESAs on properties of up to 6,000 acres in size. Properties and adjacent properties have contained AST facilities, LUST facilities, irrigation equipment and manufacturing facilities using hazardous chemicals. Research experience includes assessing aerial photographs, historic topographic maps and city directories for Phase I ESA sites. Experienced at conducting online research through various federal agencies including the National Resources Conservation Service (NRCS) and the Federal Emergency Management Agency (FEMA) as well as through local city government websites. Conducted file reviews at the Colorado Division of Public Health and Environment (CDPHE) and the Colorado Department of Labor and Employment Division of Oil & Public Safety.

- **Subsurface sampling – groundwater and soil**
Field activities include performing site reconnaissance for subsurface sampling, groundwater monitoring sampling, and documentation of field activities including chain-of-custody documentation for samples. Worked in Yellowstone National Park sampling and developing groundwater monitoring wells for the Wyoming Department of Environmental Quality (WDEQ). Also responsible for preparing quarterly and annual groundwater reports for the WDEQ.
- **SPCC plan preparation**
Ms. Mushock has prepared Spill Prevention Control and Countermeasure (SPCC) Plans for several facilities. Her SPCC experience includes plan preparation for agricultural feed distribution facilities and natural gas compressor plants.
- **Limited Site Assessments**
Ms. Mushock has performed Limited Site Assessments (LSI) which include drilling oversight, soil and groundwater sampling, sample collection for environmental analyses and report preparation.
- **Asbestos/Mold Assessments**
Performed asbestos/mold investigations in Colorado and Wyoming.

EDUCATION

*Bachelor of Science, Biology,
University of Kansas, Lawrence,
Kansas, 2006*

**REGISTRATIONS/
CERTIFICATIONS**

*Terracon's Phase I ESA Training
Program*

*40 Hour OSHA Hazardous Waste
Operations Training*

*Adult CPR/Standard First Aid
Training*

*Certified EPA-AHERA/State of
Colorado Asbestos Building
Inspector*

Nuclear Density Gauge Training

Wetlands Delineation

NAUI Certified Scuba Diver

WORK HISTORY

*Terracon Consultants Inc.,
Administrative and
Environmental Support, June,
2005-2006; Environmental
Scientist, 2006 to present*

*Bethany Republican-Clipper
Newspaper, Assistant Editor,
Photographer, Reporter,
November, 1994 – June, 2004*

*College Research Study – Marmot
Behavior at Capitol Reef
National Monument, Torrey,
Utah, 1993*