

0069

**Bid for the
Initial Review Document,
Determination of Completeness,
and
Findings and Supporting Documentation
on the
Rilda Canyon Mine
West Appa Coal Company
Emery County, Utah**

**Submitted by Rindahl & Assoc., Inc.
In Response to Req. No. 580322
Dec. 20, 1983**

FILE IN Expandable

Refer to Record No. 0069
in closure 1983, incoming
for additional information

**PREPARED BY
RINDAHL AND ASSOCIATES
2305 S. SYRACUSE WAY
SUITE 217
DENVER, COLORADO 80231**



Gilbert F. Rindahl, P.E.

C. Jay Silvernale

Bruce G. Rindahl

Rindahl & Associates • 2305 S. Syracuse Way • Suite 217 • Denver, CO 80231 • (303) 696-6846

December 16, 1983

Department of Administration
Division of Purchasing
2112 State Office Building
Salt Lake City, Utah 84114

Attention: Mary Boucek, DOGM, 4241 State Office Building

RE: Requisition No. 580322

Dear Ms. Boucek:

Rindahl & Associates, Inc. is pleased to submit for your evaluation and favorable consideration the enclosed bid for the Initial Review; Determination of Completeness; Findings and Supporting Documentation on the West Appa Coal Company application for its Rilda Canyon Mine.

We have enclosed resumes for the team to be involved in the review process. Mr. Jay Silvernale will be the Team leader/Project manager and your principal contact. As you can see from the resumes, team members have direct background experience with the review and preparation of mining plans and their areas of expertise fulfills DOGM's technical discipline requirements.

Rindahl & Associates, Inc. is aware this is a fixed price contract. Further, Rindahl & Associates, Inc. has no conflict of interest in doing the project for DOGM. Neither Rindahl & Associates, Inc., its personnel, nor any of its Associates have performed work for West Appa Coal Company at any time in the past nor will Rindahl & Associates, Inc. accept work from West Appa Coal Company for a period of one year from date of contract with DOGM.

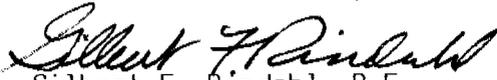


Ms. Mary Boucek
Department of Administration
December 16, 1983
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Rindahl & Associates, Inc. looks forward to working with DOGM on this project. If you have any questions, feel free to contact Jay Silvernale or me.

Sincerely,

RINDAHL & ASSOCIATES, INC.


Gilbert F. Rindahl, P.E.
President

GFR/jl/15

Enclosures

File No. 83-1202

STATE OF UTAH
INVITATION AND BID
REQUEST FOR PROPOSAL



DATE December 07, 1983

REQUISITION NO. 580322

DEPARTMENT Natural Resources

DP 70

PAGE 1 OF 1 PAGES

STATE OF UTAH
DIVISION OF PURCHASING
2112 STATE OFFICE BLDG.
SALT LAKE CITY, UTAH 84114

Bids properly marked as to Bid No., Date and Hour of Opening, subject to the conditions herein stipulated and in accordance with the specifications set forth and/or attached hereto, will be accepted in the office of the DIVISION OF PURCHASING, Room 2112, State Office Building, Salt Lake City, Utah 84114, prior to following date and time.

DATE December 20, 1983 TIME 10:30 A.M. _____ P.M.

ALL INQUIRIES AND CORRESPONDENCE TO BE ADDRESSED TO: Becky Curtis PHONE: 533-4618

QUOTE PRICES F.O.B. DESTINATION SEE FREIGHT BID REQUIREMENT SHEET

DELIVERY LOCATION 4241 State Office Bldg, SLC, Utah 84114

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	FREIGHT CHARGE IF APPLICABLE	TOTAL
		Brand names and model numbers must be furnished with bid.			
		CONTRACT: TECHNICAL ASSISTANCE IN PERMIT REVIEW RELATED TO THE COAL MINING AND RECLAMATION PERMANENT PROGRAM, as per attached specifications:			
		Phase I - Initial Review	2,980		2,980
		Phase II - Determination of Completeness	2,430		2,430
		Phase III - Findings and Supporting Documentation	9,480		9,480
		Travel & Per diem	2,300		2,300
		Miscellaneous	500		500
					17,690

Cash discounts of less than 30 days will not be considered in awarding.

IMPORTANT: PLEASE READ
FAILURE TO SIGN THIS PROPOSAL IN INK WILL RESULT IN THIS BID BEING REJECTED.

Cash discount terms _____ Company Rindahl & Associates, Inc.

Requested Delivery Date _____ Address 2305 S. Syracuse Way, Suite 217

Denver, Colorado 80231 ZIP CODE

THIS MUST BE NOTED
Please quote number of calendar days required for delivery after receipt of purchase order

Telephone (303) 696-6846

Per requisition No. 580322 days. Signature Robert F. Rindahl

NOTE: See terms and conditions governing bids and sales to State on Reverse side. Title President

C.E. "JAY" SILVERNALE

PRINCIPAL INVESTIGATOR/SOIL SCIENTIST

EDUCATION

A.A. Engineering, Phoenix College
B.Sc. Chemistry, Arizona State University
M.Sc. Soil Science/C.E. Hydrology, Oregon State University

SPECIALTIES

Soils investigations * Soil surveys * Soil survey report writing * Soils interpretation for regulatory requirements * Reclamation of severely disturbed lands * Coal permit application preparation/review * NEPA compliance

EXPERIENCE

Mr. Silvernale's recent experience includes mining permit application preparation and program management for natural resources development. He was principal coordinator between the Office of Surface Mining and the State of New Mexico on several coal mining operations in N.W. New Mexico and as such gained extensive field experience on coal related reclamation problems, i.e. soils, water, vegetation, etc.

Mr. Silvernale's past experience has included:

Soil and watershed surveys party leader or project inspector on single soil surveys of as much as one million acres. He has had similar experience with hydrologic studies and surveys.

Dealt with slope stability and bearing strength problems. Designed slope buttresses and wildlife islands. Principle consultant on designs for roads and foundations relative to unstable landscapes, cut-and-fill slopes, expansive soils, and hydraulic properties of natural materials.

Performed soil erosion and sedimentation evaluations for thousands of acres of mis-managed rangelands. Designed erosion control structures after doing field studies to determine point sources.

Trained and supervised field team members in soils, hydrology, range and forestry aspects of the various disciplines and how they interact. Trained field teams in methods of determining and evaluating erosion potential, techniques in sediment and erosion reduction, and control for long-term operational plans. Provided reclamation and

sediment/erosion control guidance to coal mining operations, forestry operations, and oil and gas exploration activities. Solid waste[management relative to hydrology, soils, water quality and soil chemistry adds to his resource management background.

His project management experience comes from two years with the Office of Surface Mining (OSM), Denver office, as a hydrologist and senior technical project officer and program management related to positions he held during four years with the Bureau of Land Management (BLM), in Western Montana.

Worked on several mining permit applications with OSM requiring extensive technical input. As technical project officer with OSM he coordinated multidisciplinary environmental teams with participants from private, state and federal concerns. He has reviewed and written various sections for numerous apparent completeness reviews (ACR's), technical assessments (TA's) and subsequent environmental documents to satisfy the National Environmental Policy Act (NEPA) process.

Worked extensively with hydrology, soil science, range management, civil engineering, reclamation, and the interrelationships of these disciplines.

Extensive experience in laboratory analysis of the chemical and physical properties of soil and water. He is also familiar with soil mechanics and the use of soil as a building material.

PROFESSIONAL AFFILIATIONS

Soil Conservation Society of America
National Water Well Association
Sigma XI
Soil Science Society of America

PROFESSIONAL PAPERS

Turbidity in Prineville Reservoir as Related to Soils and Hydrology, 1976. Masters Thesis, 172 p. Oregon State University.

Soil and Watershed Characteristics in Relation to Turbidity of the Prineville Reservoir, Special Report 453, Agricultural Experiment[Station, Oregon State University, Corvallis, 1976.

OTHER QUALIFICATIONS

Single engine Commercial Pilot
Certified Flight Instructor - instrument

FLORENCE MUNTER SCHALLER

ENVIRONMENTAL SCIENTIST

EDUCATION

M.A. Environmental Science, 1975
Northeastern University, Boston, MA
Interdisciplinary program in Environment (over 30
credit hours each in political science, earth science,
and economics)

EXPERIENCE

Submitted ←
EARTH RESOURCE ASSOCIATES, Denver, Colorado. Associate,
1981 to present. Completed review and analysis of selected
mining and reclamation plans of existing and proposed Powder
River basin coal mines. As an independent consultant, is on
contract with a major oil shale development company, to
complete submittals necessary for regulatory compliance.

OFFICE OF SURFACE MINING, Reclamation and Enforcement Region
V, Denver, Colorado. Environmental Scientist, 1979-1981.
OSM's regional specialist on NEPA, requirements of the
Council on Environmental Quality regulations and the
Department's policies and rules. Coordinated the
environmental review of coal mining and land reclamation
plans to insure compliance with the Surface Mining Act as
well as NEPA. Developed regional format and guidance for
environmental assessments. Advised interdisciplinary staff
on the preparation of impact analyses for environmental
impact statements and environmental assessments.

OFFICE OF ENERGY, U.S. Environmental Protection Agency,
Region VIII, Denver, Colorado. Environmental Protection
Specialist, 1979.

Served as a specialist on environmental impacts of energy
conversion facilities, specialist on environmental impacts
of energy conversion facilities, particularly coal and
uranium. Reviewed environmental impact statements and
related documents on western energy development and advised
environmental impact statement review staff as to Agency
policy and state-of-the-art techniques in the energy field.

OFFICE OF FEDERAL ACTIVITIES, U.S. Environmental Protection
Agency, Washington, D.C. Environmental Protection
Specialist, 1978-1979.

EPA's principal contact in maintaining liaison with the
Nuclear Regulatory Commission (NRC) and with the Department
of Energy (DOE). Coordinated EPA's review of environmental
impact statements, regulations, and policies of NRC and DOE on
nuclear energy actions. Determined extent of environmental
issues and prepared EPA comments on NRC and DOE projects of

BENJAMIN R. GENES
ENVIRONMENTAL ENGINEER

EDUCATION

- B.S. Environmental Resource Management, 1978
The Pennsylvania State University
- B.S. Environmental Engineering, 1981
The Pennsylvania State University

SPECIALTIES

Water pollution control * Water quality chemistry * Surface water hydrology * Technical and environmental analyses for mine plans * Preliminary designs and cost analyses for industrial and hazardous waste sites

EXPERIENCE

Mr. Genes' most recent experience has involved analyzing, interpreting, and recommending surface water diversions for major inflow areas to a top ten EPA Superfund hazardous waste site in Oklahoma. Mapping of ground water and surface water discharge areas over a 72 square mile abandoned mine site.

Mr. Genes' past experiences have involved:

Preliminary design and cost analysis of 2 mgd treatment facility in the Picher Mining District, Oklahoma, which is one of the top ten hazardous waste sites under EPA Superfund program.

Acidic wastewater feasibility and cost assessments for coal and mineral storage sites around the U.S.

Technical and environmental analyses for surface water hydrology and fish and wildlife portions for mine plans.

Waste characterization, regulatory definition and treatment system design for oil wastes at an industrial facility in Denver, Colorado.

As a hydrologic technician, coordinated the sampling scheme for measuring water quality parameters in the Potomac Estuary and conducted water quality tests for BOD, ammonia disappearance and nitrification.

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
Water Pollution Control Federation
National Wildlife Federation

OTHER QUALIFICATIONS

Registered Engineer-in-Training (EIT) in Colorado and Pennsylvania

PUBLICATIONS

Scheibach, R.B., B.R. Genes, and R.E. Williams. Controlling Acid Mine Drainage from the Picher Mining District, Oklahoma. International Journal of Mine Water; pp. 45-52. No. 1 March 1982.

Genes, B.R., R. Jarman, and R.B. Scheibach. Treatment Technologies to Abate Acid Mine Drainage. Proceedings of the ASCE 1982 National Conference on Environmental Engineering; pp. 165-172. July 1982.

RICHARD C. MOORE

HYDROGEOLOGIST

EDUCATION

- B.A. Colorado College, Colorado Springs, Colorado,
Geology, 1969
- M.S. Colorado State University, Fort Collins, Colorado
Environmental Geology, 1979

SPECIALTIES

Ground water hydrology * Computer modeling of ground-water systems *
Abandoned mine land reclamation studies * Ground- and surface-water
impacts associated with subsidence

EXPERIENCE

Mr. Moore's most recent experience has involved:

Abandoned mine land reclamation study in New Mexico. The study will develop a reclamation plan to initiate mine closure, backfilling, top soiling and revegetation with unit costs. The study will also be used to develop a "handbook" for similar sites in New Mexico.

Reclamation plan for an oil shale facility, Rifle, Colorado. The development of this reclamation plan involved the compilation of affected lands, geology, ground- and surface-waters, soils, and vegetation information. The plan provides detailed mine closure specifications and unit costs for reclamation including soils and revegetation, labor costs and environmental effects.

Health and safety in underground mine waste disposal. Investigation of the negative and positive health and safety aspects of underground backfilling. Development of a ranking of health and safety considerations, design of laboratory and in-mine experiments and development of recommendations for health and safety guidelines in underground mine waste disposal.

Mr. Moore's past experiences have involved:

A study aimed at reducing the salinity contributions to the Colorado River of thermal saline springs in the Glenwood-Dotsero area of Colorado. His responsibilities included collecting and evaluating geologic and hydrologic data through a literature search and associated field work.

Worked on a project involving the modeling and monitoring of ground- and surface-water in the Powder River Structural Basin of Montana and Wyoming. The project uses design to assess and predict the effects of coal surface mining on the water resources in the region. Mr. Moore assisted in the collection and analysis of geologic data, performance of pumping tests to determine aquifer characteristics, well logging, and hydrologic analysis.

A project requiring technical and environmental analyses of proposed mining and reclamation plans submitted to the Office of Surface Mining Reclamation and Enforcement. Mr. Moore worked primarily on the surface water and alluvial valley floor portions of these analyses.

Worked on a contract for the U.S. Bureau of Mines which consisted of assessing the potential ground- and surface-water impacts associated with subsidence over thickseam, underground, longwall type coal mines in the western United States. The project involved identifying potential thickseam, longwall sites in the west, surveying current methods of predicting subsidence, analyzing potential impacts, and applying the developed methodology to ten hypothetical sites.

Project scientist for a contract with the U.S. Bureau of Mines requiring a survey of available air and water environmental monitoring instrumentation as it applies to various federal regulatory programs covering surface and underground mining.

GILBERT F. RINDAHL, P.E.

EDUCATION

1958-1959 U.S. Air Force Institute of Technology
Wright Patterson AFB, Ohio
Civil Engineering

1949-1953 U.S. Naval Academy, Annapolis, Maryland
B.S. Engineering

1948-1949 Luther College, Decorah, Iowa

SPECIALTIES

Construction Management * Mining Engineering * Concrete
Design and Testing * Structural Analysis * Permitting

EXPERIENCE

President of Engineering consulting firm involved in mine site planning and development, environmental assessment and compliance, including review and approval of soils, vegetation and hydrology/geohydrologic plans and programs for mined land reclamation, asphalt and concrete, plant design and specifications, and materials handling systems, civil and structural engineering.

Partner in engineering consulting firm involved in civil, structural engineering. In addition, work involves mine planning, geohydrology interpretive report, structure and materials handling, design and reclamation engineering relative to various mining operations.

Design and inspection of earthen structures related to mining i.e., sediment ponds, ramps, and loadout ponds. Prepared and reviewed mining and reclamation applications. Prepared reclamation cost estimates based on civil engineering aspects of reclamation operation for hydrologic, vegetation and soil handling and revegetation.

Private consultant, Building Code engineer. Reviewed architectural and structural design for compliance with the uniform building code. Consultant work for mining companies to prepare mining and reclamation plans for state permits.

Director of the Mined Land Reclamation Division, State of Colorado. Managed the mine reclamation staff. Performed engineering analysis of mine plans and reclamation operations.

Supervised and performed plan check review for all major construction in the City of Denver, CO. Supervised three professional engineers and 17 building inspectors.

Overall monitoring and supervision of worldwide Air Force construction and maintenance of structures.

PROFESSIONAL AFFILIATIONS

American Consulting Engineers Council
American Society of Mechanical Engineers
Colorado Engineers Council, Past President
Colorado Society of Engineers, Past President
National Society of Professional Engineers
Professional Engineers of Colorado
Society of American Military Engineers

OTHER QUALIFICATIONS

Registered Professional Engineer in the States of Colorado, Montana, North Dakota, Ohio, South Dakota, Utah and Wyoming.

Air Transport Pilot
Certified Flight Instructor, Instrument

JUDITH L. HAMILTON, P.E.

GROUND-WATER ENGINEER

EDUCATION

B.A. Geology, Smith College, 1961
M.Sc. Civil Engineering, University of Illinois, 1964

SPECIALTIES

Investigations of ground water * Environmental impact of coal mining on ground water and geology * Ground-water monitoring programs * Ground-water quantification studies and interpretations

EXPERIENCE

Ms. Hamilton's recent experience has dealt with coal mining ground-water monitoring plans, supervision of test well and monitor installation, conducting and analyzing ground-water pumping tests for coal mines.

Ms. Hamilton's past experience has been:

Supervision of construction of monitor holes ranging to 2000 feet in depth to investigate ground-water conditions for open-pit and underground coal mines in Colorado, Wyoming and Montana.

Investigations for and preparation of reports on ground-water and geologic aspects of environmental impact analyses for coal mines, Powder River Basin, Wyoming and Montana. Projects included development of a ground-water monitoring program, supervision of well and observation hole construction, well testing, and analysis of results.

Conducting water-well inventories for use in analyzing effects of open-pit mining of uranium in southeast Texas and of coal in central Montana.

Development of a ground-water monitoring program for a proposed insitu uranium leaching site, northeastern Wyoming, including locating and designing monitor holes and test wells, conducting pumping tests and analyzing results to determine aquifer parameters and effects of mining.

Review of existing EIS and EIA's in conjunction with development and preparation of EIS's for proposed coal mines. Work included determination of completeness of existing reports to provide guidelines for developing a program of investigating ground-water conditions and the impact of mining for the new area.

Investigations for and preparation of reports on ground-water availability and engineering geologic conditions for proposed industrial, commercial, and residential developments in Colorado.

PROFESSIONAL RESUME
WILLIAM RENNIE KILLAM
SENIOR ARCHAEOLOGIST

EDUCATION

University of New Mexico Graduate School - Santa Fe
Branch, Public Administration - advanced studies
toward M.B.A., 1977

B.A. Lake Forest College, Lake Forest, Illinois, 1969-1973
Anthropology/Sociology and Psychology

EXPERIENCE

July 1981 to Present:

Subsequent → Goodson & Associates, Inc., Consulting Engineers, Lakewood
Colorado, Senior Archaeologist and Principal Investigator

Managing the cultural resources program with duties
including: technical and business proposal preparation;
overall project planning, coordination and supervision;
direct field crew supervision and site recordation and
evaluation; preparation of reports including land and
cultural resources management recommendations.

Projects include: Preparation and testing of a predictive
model and Class II survey of 80,000 acres of BLM land in
Eastern Utah, Co- Principal Investigator, current project.

Multi-level survey for timber sales in the Gunnison &
Uncompahgre National Forests, Colorado, Principal
Investigator, 4 months, 1982.

Reconnaissance survey and records search for the Colorado
Yampa Coal Company in northwestern Colorado, Principal
Investigator, 2 months, 1982.

Multi-level survey for timber sales in the Medicine Bow
National Forest, Wyoming, Principal Investigator, 9 months,
1981-1982.

March 1980 to July 1981:

U.S. Department of the Interior, Office of Surface Mining,
Reclamation and Enforcement, Region V, Denver, Colorado,
Assistant Regional Archaeologist (I.P.A.)

W. KILLAM (Cont'd)

EXPERIENCE (Cont'd)

Ensured OSM and mine plan applicant compliance with all pertinent federal and state legislation, regulations, rules and policies by reviewing cultural resources portions of applications for coal mines in the states of Colorado, Wyoming, Utah, New Mexico, Montana, Washington, Arizona, and North Dakota, preparing technical and environmental analyses documents and coordinating this effort with federal and state agencies and mine plan applicants. Performed cultural resources surveys on proposed mines and abandoned mine projects in Utah, New Mexico, Wyoming and Washington and prepared subsequent reports and compliance documentation.

October 1976 to March 1980:

State of New Mexico, State Highway Department, Santa Fe, New Mexico, Highway Archaeologist

Performed cultural resources surveys for rights-of-way and material pits, prepared subsequent reports and compliance documentation and coordinated these procedures with appropriate federal and state agencies. Reviewed and approved survey and mitigation reports, proposals and budgets submitted by the Department's cultural resources contractor, and assured that all services provided were accomplished according to the contracts. Coordinated cultural resources field work with construction schedules to avoid work delays and impact to resources, and provided formal and informal training to Department field personnel. Inspected excavation projects being performed by crews under contract to the Highway Department; especially on sites of Anasazi and Mogollon cultural affiliation, Supervised the work of the Assistant Highway Archaeologist performing similar duties.

December 1974 to September 1976:

State of New Mexico, State Museum, Laboratory of Anthropology, Santa Fe, New Mexico, Site Supervisor, Assistant Site Supervisor and Excavator

Excavated numerous cultural resources sites in northwest and northcentral New Mexico.

W. KILLAM (Cont'd)

EXPERIENCE (Cont'd)

Site Supervisor: Supervised the total excavation of an 18 room Anasazi pueblo as per the research design; and all subsequent laboratory analysis of recovered lithic, ceramic and faunal material. Prepared several sections of the report. 9 months.

Assistant Site Supervisor: Assisted with the excavation of eight sites including a multi-component Anasazi/historic pueblo/residence of over 50 rooms, a 20-room Anasazi Pueblo, an Anasazi/Navajo rock shelter, and several small Anasazi and Archaic sites. 11 months.

Excavator: Excavated and mapped three Anasazi campsites and water control sites and one Archaic lithic scatter. Performed lithic material analysis in the laboratory. 2 months.

February to June 1973:

Lake Forest College, Lake Forest, Illinois, Teaching Assistant

Duties included preparing and leading class discussions, developing and grading tests and assisting with students' understanding of course material in beginning anthropology classes. Subjects included American Indian Ethnology, History and Archaeology; African Ethnology and Archaeology; and a general study of kinships systems.

ADDITIONAL TRAINING

1980 "Contracting for Program and Project Officers"
Presented by Sterling Institute and Office of Surface Mining, Denver, Colorado - 16 hours

1979 "Historic and Archaeological Preservation" - Presented by Department of Transportation and National Highway Institute, Santa Fe, New Mexico - 32 hours

LYNN E. FISHER
TERRESTRIAL BIOLOGIST

EDUCATION

Durham University, Durham, England
Geology, 1972

B.A. Hiram College, Hiram, Ohio
Biology, 1973

M.S. Michigan State University, East Lansing, MI
Wildlife Ecology, 1977

EXPERIENCE

Ms. Fisher's most recent experience has involved:

Project coordinator for developing habitat analysis guidelines and formulating alternative strategies for management of right-of-ways for wildlife in the 48 contiguous states.

Assessment of the potential habitat in western Kansas for peregrine falcons and mountain plovers.

Ms. Fisher's past experiences have involved:

Drafted a reclamation and management plan for a gold and silver mine near Central City, Colorado.

Wrote and reviewed biological assessments, management plans and EIS's for the Bureau of Reclamation and the U.S. Forest Service.

Developed a field study design to identify essential habitat for threatened and endangered species occurring on project lands.

Coordinated the endangered species program and other environmental studies with other government agencies, universities, environmental organizations and private individuals.

Field experience includes radio-telemetry, trapping, spotlighting, wildlife inventory, raptor nesting surveys, behavioral studies, habitat analyses, vegetative collection and identification, mapping, soils analyses, and impact assessment.

DR. KENNETH C. KO, P.E., PRESIDENT

For over 15 years, Dr. Ko has worked as a researcher, engineer and consultant in the area of mining and geotechnical engineering for various surface and underground mines. He has authored numerous technical papers and reports on geotechnical engineering related to mining. He is a registered professional engineer in the States of Colorado, New Mexico, Wyoming, Nevada, and Utah.

Since founding the company he has managed and directed projects for feasibility and mine planning through mine design and reclamation planning for coal, uranium, and metal mines in Asia, Africa, and Western United States.

EDUCATION:

Ph.D., Mining, University of Missouri
M.S., Mining, University of Washington
B.S., Mining, Seoul National University

PREVIOUS EXPERIENCE HIGHLIGHTS:

(1973-1975) W.A. Wahler & Associates:

Advanced from Senior Engineer to Supervisory Engineer. Assignments undertaken include feasibility study and design of tailings dams, safety inspection and design of coal waste dumps and impoundments, open pit and underground mining engineering from field investigation to design. He was responsible in mining section for business development, proposal and report preparation, and coordination of projects from field investigation through final design.

(1972) State of West Virginia:

Consultant to the Ad Hoc Committee of Inquiry into the Buffalo Creek Flood, on determination of the probable cause of the Saunders Dam failure and on development of the legislative requirements for mine refuse embankment regulation.

(1970-1973) Kennecott Copper Corporation:

Associate Mining Engineer of Engineering Center, Metal Mining Division, responsible for stability analysis of open pit slopes, leach dumps and tailings dams of the corporation's division mines, and for research, development and application of slope failure control techniques. The study of numerous soil and rock slope failures led to the development of the rheological model for unstable slopes and parametric techniques for designing stable pit slopes. Effective applications included stabilization of an unstable slope involving over 20 million tons of rock mass and movement control of a massive rock slope failure exceeding one million tons. Also performed feasibility study, mine design and economic analysis on copper deposits with application of computer techniques.

(1968-1970) Rock Mechanics and Explosives Research Center, University of Missouri:

Senior Research Assistant responsible for research on experimental investigation of small scale lined and unlined cylindrical cavities in rock-like material, and for development of failure criteria and deformation moduli of heterogeneous rock materials.

(1966-1968) University of California, Berkeley, Civil Engineering Department:

Research Fellow. Post graduate studies and research in soil mechanics and geological engineering.

(1964-1966) Western Nuclear, Sunshine Mining Co. and Susquehanna-Western:

Duties included mine surveying, exploration drilling, feasibility study, cost analysis and mine design.

AFFILIATIONS:

SME-AIME, ASCE, Denver Coal Club, Colorado Mining Association, Denver Mining Club, Northwestern Mining Association, ISRM.

BRUCE G. RINDAHL

EDUCATION

B.S., Civil Engineering, University of Tennessee, 1979.

SPECIALTIES

Hydrologic and Hydraulic Analysis * Mining/Reclamation Design * Flood Control, and Drainage Plans * Water Resources Development * Computer Applications to Water Resources Problems * Computer Applications of Civil Engineering Design

EXPERIENCE

Write Mining/Reclamation Plans, design of retaining walls and foundations, earthwork inspection, and pre and post-mining site inspections. Responsibilities have included hydrologic and hydraulic analysis for water resources projects including ground water availability, floodplain information, flood control and drainage plans. Back filling and design of placer mines, and sand and gravel operations to approximate original contour. Computer applications which included the use of HEC-2, SWMM, Colorado Urban Hydrograph Procedures (CUHP) models used in hydrologic and hydraulic analysis. Specific projects include:

- Hydraulic design and construction supervision of major drainageway improvements.
- Construction supervision of concrete water storage tank and wastewater treatment facility.
- Construction supervision of water distribution system improvements.

Other project design and inspection work include:

- Floodplain delineation for six municipalities.
- Performed drainage studies which included formulation of drainage plans for a number of proposed developments.

Work with a large mining operation of which the responsibilities included production studies, quality control studies, in charge of test drilling and property mapping. Design and modification of mining methods and close out of phases of operations.

BRUCE G. RINDAHL, Page 2 of 2

Surveying experience with responsibilities in construction surveys and route surveys.

Experience as materials testing engineer. Responsibilities included field and laboratory testing of concrete, mix design of concrete, field and laboratory testing of asphalt, field density testing, mix design. Subsurface soil investigating, soil classification, engineering reports of soils, density and moisture field tests of soils.

PROFESSIONAL AFFILIATIONS

Colorado Society of Engineers
Water for Colorado

Engineer in Training



Telegram

SLB008(1237)(1-008711A354)PD 12/20/83 1236

ICS IPMPTUD PTL

01891 12-20 0932A PST PTUC

ICS IPMSL43

4-02 1596S354 12/20/83

ICS IPMRNCZ CSP

8017524202 TDRN LOGAN UT 20 12-20 1218P EST

PMS STATE OF UTAH

DIVISION OF PURCHASING

ATTN BECKY CURTIS RPT DLY MGM, DLR

2112 STATE OFFICE BLDG

SALT LAKE CITY UT 84114

PLEASE NOTE THE FOLLOWING CORRECTION TO BIO/WESTS BID ON REQUISITION

#580322. IN COST PROPOSAL, TOTAL COST SHOULD BE \$18,508.08

SINCERELY



STATE OF UTAH
 NATURAL RESOURCES
 Oil, Gas & Mining

Scott M. Matheson, Governor
 Temple A. Reynolds, Executive Director
 Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 27, 1983

Ms. Catherine Collis, Director
 Division of Purchasing
 2112 State Office Building
 Salt Lake City, Utah 84114

RE: Requisition No. 580322

Dear Ms. Collis:

The Division of Oil, Gas and Mining has reviewed the bids received in response to the requisition referenced above. The Division has selected NPI as the contractor on the basis of qualifications and quality of bid proposal. This firm is based in Salt Lake City and, due to the stringent schedule requirements of the contract, their convenient location will aid in adhering to the time frame necessary for execution of the work. Several NPI personnel have been employed in the past by the Federal Office of Surface Mining and, as such, have considerable experience in permit review of Utah coal mining operations. In addition, NPI was the only respondent to include a detailed cost breakdown in their bid, which the Division will add to the signed contract.

The Division has not selected the remaining respondents based on the following criteria:

Rindal & Associates - The proposal consisted exclusively of resumes and the company did not demonstrate qualifications or a technical approach to the work order, nor was a detailed labor or cost breakdown included. Though certain personnel of this Company have past experience as Office of Surface Mining employees, their work did not involve Utah coal mining operations. The firm does not have any Utah representation.

Bio/West, Inc. - The proposal consists of a technical approach, as well as qualifications and labor breakdown, but does not contain a detailed cost breakdown. Though this firm is Utah based and has considerable experience in permit review, the Division has not been totally satisfied with the recent quality of their work on an on-going contract and does not choose to enter into another contract with the firm at this time.

24,977.00

\$17,690.00
 eliminated

18,508.00
 as to
 quality of
 work

Ms. Cahterin Collis, Director
December 27, 1983
Page 2

*Expects
lack of experience*

Beak Consultants Incorporated - The proposal consists of a technical approach and demonstration of qualifications, but does not include a detailed labor or cost breakdown. The Company itself has not contracted for coal mine permit review before, either with the Division or the Office of Surface Mining. One of the firm's personnel has past experience as a contractor to the Office of Surface Mining, but not involving Utah coal operations. The Company does not have any Utah representation.

20,950⁰⁰

Simons, Li & Associates, Inc. - The proposal contains qualifications and experience sections but does not address a detailed labor or cost breakdown. This Company is currently under contract to the Division for permit review and has also been contracted by the Office of Surface Mining for review of four additional Utah coal mines. The Division does not choose to enter into another contract for permit review with this Company at present due to the firm's commitment to their other Utah coal permit reviews and their questionable ability to adhere to the stringent schedule as outlined in the requisition order.

*No problem
too high
29,190⁰⁰*

Should you have any questions regarding the Division's selection of NPI or of you need further information, please contact Mary Boucek of my staff.

APPROVED
Date 12-28-83
Catherine Collis
Director Purchases

Sincerely,

Dianne P. Nielson

Dianne Nielson
Director

DN/MMB:btb

cc: Ron Daniels, DOGM
Jim Smith, DOGM
Mary Boucek, DOGM

Rindal \$17,690⁰⁰ - disqualify - did not demonstrate quality reactions.

Bio West \$18,508 - disqualify - questions as to quality of work.

Beak \$20,950 - disqualify - lack of experience

NPI \$24,977 - award

Simons \$29,190 -



Telegram

THOMAS M TWEDT
PO BOX 3226
LOGAN UT 84321

12 19 EST
NNNN



M E M O R A N D U M

December 28, 1983

TO: Catherine Collis, Director, Division of Purchasing
FROM: Mary Boucek, Permit Supervisor *Mary Boucek*
SUBJECT: Requisition No. 580322

According to the Statement of Work for the above referenced Requisition, the Contractor is to be selected on the basis of qualifications as well as cost. The primary qualification by which all proposals were judged was experience of the Contractor's personnel in coal mine permit review involving Utah mines specifically. The Division of Oil, Gas and Mining has selected NPI because three individuals intricately involved in execution of the statement of work, including the project manager, have considerable experience in reviewing Utah coal mining permit applications. These individuals are Mr. Tom Guobis and Mr. Kevin Allred of NPI and Mr. John Nadolski of J. F. Sato & Associates, subcontractor to NPI. These three persons have worked as employees of the Office of Surface Mining in Denver and were directly involved in the permitting review of several Utah coal operations and in coordination with the DOGM. Two other firms bidding on this requisition also have considerable experience in permit review of Utah mines, namely Bio/West, Inc., and Simons, Li & Associates. The Division does not choose to enter into a contract with either of these firms at this time for reasons as outlined in Dianne Nielson's letter to Purchasing, dated December 27, 1983. Neither Rindahl & Associates nor Beak Consultants demonstrated permit review experience which involved Utah coal mine permit applications.

In addition, the Statement of Work required that bids should be based on labor charges for personnel in each technical discipline. NPI is the only respondent who broke their bid out by technical disciplines and labor charges. The other respondents returned lump sum bids and did not show how their estimated costs were arrived at.

Should you have any additional questions, please feel free to contact me.

MMB/btb

cc: Dianne Nielson, DOGM