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UNC MINING AND MILLING



Division of United Nuclear Corporation
A **UNC RESOURCES** Company

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December 8, 1980

Cubia L. Clayton
NM Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503

Dear Mr. Clayton:

United Nuclear Corporation has been providing the Environmental Improvement Division, the State Engineers Office and the Nuclear Regulatory Commission with the weekly reports on the Northeast Churchrock Tailings Impoundment Area. This complies with the NMEIU letters dated October 23 and 31, 1979, the NRC order dated October 26, 1979, and the State Engineer's letter dated February 29, 1980. Data reported has been compiled by Science Applications, Inc. and UNC personnel with all reports being certified by Mr. Donald G. Silva, P.E., of Science Applications, Inc. (New Mexico Registration No. 6754).

In an effort to reduce costs associated with monitoring and reporting, United Nuclear Corporation has increased its staff with qualified personnel so that all data can be collected, recorded and certified by UNC personnel. Mr. Satya Deb Misra has had his credentials reviewed by the New Mexico State Board of Registration for Professional Engineers and Land Surveyors, and is certified in New Mexico (Registration No. 7621). A copy of Mr. Misra's resume and certification is enclosed.

United Nuclear Corporation requests your approval of the proposal to prepare, report and certify the Northeast Churchrock Tailings Impoundment Weekly Report using our own personnel. Thank you for your consideration in this matter.

Sincerely,

Thomas M. Hill
Director, Tailings Management

TMH:jb

Enclosures

cc: S. D. Misra
D. G. Silva



WATER POLLUTION
CONTROL

9804160389 801208
PDR ADOCK 04008907
C PDR

Satya Deb Misra
Registrant's Signature

NEW MEXICO STATE BOARD OF REGISTRATION FOR
PROFESSIONAL ENGINEERS AND LAND SURVEYORS

This is to Certify That

SATYA DEB MISRA

is duly registered as a PROFESSIONAL ENGINEER under provisions of
Chapter 363, Session Laws of New Mexico, 1979, and is hereby authorized
to practice as such in the State of New Mexico until 12/31/80
and until such times thereafter as may be provided by renewals of this
license under the provisions of Section 16 of said law, and as will be
evidenced by renewal cards issued by this Board.
In Testimony Whereof this card is issued.

Countersigned:

Santa Fe, N.M. 11/25/80

7621
CERTIFICATE NO.

Quentin L. ...
CHAIRMAN
Fred ...
SECRETARY

RECEIVED
DEC 10 1980

WATER POLLUTION
CONTROL

RESUME

Deb Misra
Mining Engineer

1008-A East Green Avenue
Gallup, New Mexico 87301
Telephone: (505) 722-6651, ext. 618 (days)
(505) 722-2483 (evenings)

PERSONAL DATA

Born September 10, 1942; U. S. citizen; married, one child; excellent health; wife - instructor in medical college; excellent references available

EXPERIENCE DETAILS

September, 1980 - present: UNC Mining and Milling, Northeast Church Rock, P. O. Drawer QQ, Gallup, New Mexico 87501. SENIOR ENGINEER

- Responsible for in-house design, construction, and start-up of facilities related to mill tailings and mine waste disposal, i.e., tailings dams, below grade trenches, plastic-lined evaporation ponds, water diversion channels, and other mine facilities. Duties include engineering feasibility studies, economic analysis, conceptual design, siting studies, equipment selection and acquisition, direction and supervision of various works related to construction, monitoring, surveying, and general tailings managements. The assignments involve various aspects of engineering including geology, groundwater hydrology, well hydraulics, soil mechanics, slope stability analysis, probable maximum flood evaluation, environmental engineering, industrial engineering, and computer application.
- Frequent involvement as consultant in underground mining and related support activities, mining reserve evaluation and characterization, tailings fluid treatment, sand filling of underground mine, ventilation, reclamation, and other general engineering works.
- Interfacing with the consultants, specialized contractors, and government regulatory agencies.

August, 1976 - August, 1980: Southern Illinois University, Carbondale, IL 62901. INSTRUCTOR of Mining Technology (Dept. of Technology); RESEARCHER (Dept. of Mining Engineering); and CONSULTANT (U.S. Dept. of Energy).

- Developed and started a new Mining Technology program and taught all the mining courses.
- Actively participated in research activities (both funded and self-imposed) in the areas of Underground Coal Gassification, Mine Ventilation, Computer Application, desulfurization of coal by froth flotation, study and development of pinning concept of roof bolting, and analysis of U.S./USSR test data on magnetohydrodynamics.
- Responsible for developing research proposals, helping graduate students in developing their thesis proposal and planning, organizing and monitoring their actual research work, and writing technical reports.
- Also interfaced with the government agencies, professional people, academicians and local coal industry, and was involved in consulting work related to all phases of coal mining and processing with local coal companies and various U.S. Dept. of Energy's multi-million dollar contracted projects to develop new surface coal mining methods and equipment.

February, 1974 - August, 1976: Pennsylvania Dept. of Environmental Resources (formerly Dept. of Mines), Div. of Mine Area Restoration, Wilkes-Barre, PA 18703. MINING ENGINEER/RESIDENT ENGINEER.

--Independently handled various multi-million dollar mine area restoration projects (i.e., backfilling of mine voids, surface mine reclamation, extinguishment of mine and refuse dump fires, acid mine drainage control, sub-surface investigation, environmental impact studies, etc.) in all entirety. Responsibility included complaint investigation, conception of projects, procuring government funds, preparation of project specifications, drawings and bid document, selection of contractors, control of contractors' work for compliance with the specifications, estimation of progress of work for payment, supervision of state employees including professional, supervisory, and support staff, and writing technical reports.

January, 1972 - February, 1974: Graduate study and summer experiences in various coal and metal mines of U.S. and Canada. Exposure to current mining practices, methods, and problem areas.

July, 1964 - January, 1972: Andrew Yule and Coal Company (a progressive British coal mining firm in India, producing 10 million tons of coal per year). Positions held - MINING ENGINEER, RESEARCH ENGINEER, SAFETY ENGINEER, ASSISTANT MINE SUPERINTENDENT & MINE SUPERINTENDENT.

--Handled assignments in mine reserve evaluation, feasibility studies, equipment selection, complete planning, design and layout of strip mines and underground coal mines, including Longwall operations, complete mine development and mine expansion projects and construction works, productivity studies and solution of problems related to roof control, subsidence, coal dust, methane drainage, ventilation, material handling, and coal preparation.

--Designed, installed, and controlled the complete mine ventilation systems of three large, deep, gassy coal mines and solved day-to-day problems related to ventilation; formed the safety department of a three-seam coal mining complex and successfully improved the safety standard, especially by reducing underground accidents.

--As Mine Superintendent, directed and controlled all mining activities including surface and underground production, engineering and maintenance, expansion planning, labor relation, statutory activities, cost control, manpower development, purchasing, and various other administration works.

July, 1960 - July, 1964: Various coal and metal mines in India (summers only). MINING TRAINEE (mining methods and support activities, coal and mineral processing).

EDUCATION

B.S. (Mining Engineering), Calcutta University, India, 1964. Minor-- Electrical and Mechanical Engineering. Ranked 2nd among 27 students. Equivalent G.P.A. - 4.

M.S. (Mining Engineering), Columbia University, New York, 1979. Minor-- Industrial Engineering. G.P.A. - 3.72. (Substitute for) Thesis - Safety and Productivity of Underground U.S. Coal Mines in 1970's.

Ph.D. (Interdisciplinary area), Southern Illinois University, Carbondale, Ill. Research interest: advanced methods and equipment for coal mining and utilization, Magnetohydrodynamics. Current G.P.A. - 3.93. Course work and part of dissertation research completed.

EDUCATION (cont.)

Academic background covers all aspects of coal and metal mining and processing, Industrial Engineering, Operations Research, computer application, environmental problems, material handling, mineral economics, hydrology, geology, mine safety, surveying, mine management, reaction kinetics, molecular science, higher mathematics, ground control, and soil mechanics.

PROFESSIONAL LICENSES, CERTIFICATES, AND SPECIAL TRAINING

Registered Professional Engineer, Pennsylvania and New Mexico.
First Class Mine Manager (Illinois and India), Mine Foreman (W. Virginia)
Surface Mine Manager (Illinois), Registered Mine Surveyor (India)
Notary Public (Jackson County, Illinois)
Certified MSHA Instructor

Special training: supervisory development; time and method study; first aid; fire fighting, rescue and accident prevention; ground control; erosion and sedimentation control; grievance handling; environmental protection; radiation control; uranium tailings management; Fortran programming.

MEMBERSHIPS

Society of Mining Engineers of A.I.M.E.
National Society of Professional Engineers
Sigma Xi (prospective member)
Various other engineering, cultural, humane, and religious societies