THE NAVAJO NATION

Class Code: 3021
Natural Resources and Parks Series
Water Development Group
Overtime Code: Non-Exempt
Pay Grade: 62

WATER DEVELOPMENT TECHNICIAN

DEFINITION: Under general supervision, performs sub-professional geologic/engineering work of moderate difficulty in connection with the study, research, survey, design, construction and maintenance of water development projects; performs related work as assigned.

ESSENTIAL FUNCTIONS: This list is ILLUSTRATIVE ONLY and is not a comprehensive listing of all functions and tasks performed by incumbents of this class.

TASKS:

Operates and maintains the geophysical well logging unit to obtain radioactive and electrical logs for well design, well rehabilitation, exploration and study purposes; conducts radiation surveys, performs radiation leak tests and prepares survey reports; conducts inventory of all geophysical logging tools/instruments, monitors instruments for calibration compliance requirements; conducts inspections of sealed radioactive sources, exchanges radiation monitoring badges on a monthly basis, studies radiation monitoring reports and maintains all such records as required by state and federal laws, rules and regulations for radiation safety compliance.

Researches and refines technical data; assists with the preparation of feasibility reports and finalization of technical specifications for water development projects; plots well locations, prepares drilling applications, obtains water use and drilling permits and project site clearances, compiles and maintains well records; assists with supervision of drilling operations, storage tank constructions, waterlines and well rehabilitations, reviews down hole well scans for recommendations; schedules work assignments, provides instructions and technical assistance to drilling/tank construction crews; conducts pump tests, obtains water samples for analysis; compiles and evaluates pump test data; selects pumps, motors, control panels and associated fixtures; installs electrical wiring and troubleshoots wiring, pump, motor and control panel problems; ensures compliance with all applicable safety policies, procedures, rules and regulations.

Conducts and assists with topographic/construction surveying and drafting; provides construction oversight; evaluates projects; prepares cost estimates for projects, construction plans and progress reports; reviews and finalizes project construction and cost reports; conducts final project inspections and prepares related reports; assists and conducts archaeological surveys of project sites withdrawn for water development projects; records and maps archaeological sites, specimens found, artifacts, burial sites, sweat lodges, dwellings, and other identified sacred areas; obtains archaeological and environmental clearances; may operate smeal rig and/or backhoe; provides technical assistance and information to chapter, communities, departments and individuals; assists in the preparation of budget; attends meetings and training.

KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:

Knowledge and understanding of plans, maps, specifications, construction practices and terminology.
Knowledge of mathematics of average difficulty.
Knowledge of the basic elements of geologic/engineering design and construction methods and practices.
Knowledge of selecting pumps, motors, control panels and associated fixtures.
Knowledge of the safe and proper use of a geophysical logging unit.
Knowledge of basic electrical skills and troubleshooting.
Knowledge of Global Positioning System (GPS) methods and practices.
Knowledge of basic computer skills.

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Skill in researching, examining and processing geologic/engineering data.
Skill in preparing lithologic logs and obtaining electrical and radioactive logs.
Skill in compiling written reports on project construction.
Skill in establishing and maintaining effective working relationships.
Skill in recognizing archaeological sites and cultural material.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Works requires lifting of up to 140 pounds; exposure to radioactive materials and outside weather elements.

MINIMUM QUALIFICATIONS: A high school diploma or GED; and five (5) years experience in surveying, drafting and/or handling radioactive sources; or an equivalent combination of education, training and experience which provides the capabilities to perform the described duties.

SPECIAL REQUIREMENTS: Must possess a valid state driver's license. Within 90 days of employment must obtain a Navajo Nation Vehicle Operator's Permit. Within one (1) year of employment must obtain a Radioactive Materials Handling License, a Commercial Driver's License (CDL) and a Navajo Nation Vehicle Operator's Permit – Type CDL. Additional certifications may be required.

Depending upon the needs of the Nation, some incumbents of the class may be required to demonstrate fluency in both the Navajo and English languages as a condition of employment.