

ENVIRONMENTAL ENGINEER

DEFINITION: Under general supervision, performs a range of conventional engineering work of moderate difficulty related to an environmental engineering environment requiring independent judgment and resourcefulness; assignments are reviewed by a Professional Engineer for technical accuracy and compliance with established policies, standards and codes; 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:

Examines, measures, studies, investigates and analyzes air emission sources, hazardous or solid waste facilities, water supply facilities, industrial and agricultural facilities, pollution sources, existing site conditions, water resources and underground storage tanks to determine conformance with applicable rules, standards and construction or operating permits; develops and implements emission monitoring or parametric monitoring strategies; develops techniques and guidelines for uniform engineering inspections and reporting of inspections of public water supplies; carries out engineering projects without technical guidance or instruction; where critical engineering problems occur or deviate from established guidelines obtains supervisory guidance and/or solution.

Performs engineering review of permit applications, engineering and financial reports, designs plans and specifications, engineering contracts, integrate waste management plans and periodic construction inspections to ensure compliance with applicable local, state and/or federal regulations and sound engineering practice; examines and makes engineering calculations and analyses to evaluate permit applications and plans to determine potential for development of pollution source, such calculations include determinations of pollutants to be emitted, quantities, abatement equipment available and its effectiveness and/or recommends approval or disapproval for permit or funding; confers with applicant to resolve technical problems; interprets and applies local, state and federal codes, laws and regulations in order to prepare reports, permit documents, and supporting technical memoranda or utilize in work activities.

Inspects pollution sources to ensure required environmental control procedures are maintained; reviews and responds to permit issuance challenges from Navajo Nation Courts and Environmental Protection Agency petitions; investigates complaints of noncompliance where engineering expertise is required; responds to requests received from public or private entities or individuals for information or technical assistance on numerous environmental issues or energy related issues; explains regulations; prepares required reports; participates in the development and review of departmental regulations, policies design standards and methods relating to the assigned program area to provide professional input; seeks assistance from higher level engineering authority in responding and resolving unprecedented engineering problems.

KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:

Knowledge of the principles, practices and techniques applied in engineering as relates to environmental control facilities, systems, operating procedures, instrumentation and related control devices.

Knowledge of local, state and federal environmental and/or building rules and regulations.

Knowledge of techniques used in identifying, measuring, sampling and studying environmental control.

Knowledge and understanding of federal and state agency roles, goals, objectives and jurisdiction as they relate to the control and management of engineering projects on lands owned by the Navajo Nation.

Knowledge of the application of engineering research and study methods.

Knowledge of computer hardware, software and peripherals.

ENVIRONMENTAL ENGINEER

Skill in scheduling, inspecting and providing surveillance of methods and equipment used in construction.
Skill in establishing and maintaining effective working relationships with professional engineers, government agencies and the general public.
Ability to read and understand plans and specifications and make factual comparisons to appropriate regulations.
Ability to enforce, comply and assure safety standards and health regulations.
Ability to make technical computations and calculations involving the application of engineering principles.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Work requires attention to detail with potential exposure to loud noises, dust, toxic chemicals and fumes when working on site.

MINIMUM QUALIFICATIONS:

- A Bachelor's degree in Environmental, Chemical or Civil Engineering, Environmental Science or related engineering field; and two (2) years responsible work as an Engineer and/or related work in an environmental protection/control program.

PREFERRED QUALIFICATIONS:

- A Master's degree in Environmental Engineering, Chemical, Mechanical, Civil Engineering, Environmental Science or related engineering field.
- Two (2) years of experience in air permitting, air pollution control regulations and enforcement.
- Training in air quality modeling systems, E & P Tank, GRI-GL Ycalc and GRI-HAP calc.
- Engineer-In-Training (EIT) certificate.

SPECIAL REQUIREMENTS:

- Possess a valid state driver's license.

Supplemental Requirements:

Incumbent must obtain a Navajo Nation Vehicle Operator's Permit and an EIT Certificate within one (1) year of date of hire.

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.