

AIR QUALITY 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:

Performs air quality permitting and compliance activities of various combustion and industrial facilities; performs engineering reviews of air permit applications and engineering reports to ensure compliance with federal, state, local and Navajo regulations and sound engineering practices; reviews and responds to permit issuance challenges; develops and implements emission monitoring or parametric monitoring strategies; develops techniques and guidelines for uniform engineering inspections and reporting of inspections; performs engineering analysis and detailed calculations in developing air pollutant emission rate estimates; evaluates air pollution control technology requirements; determines appropriate control requirements, applicable permit condition, emission limits, monitoring and reporting requirements; draft permits for sources in accordance with NSR, PSD, Federal Implementation Plan (FIP), GHG and Title V Clean Air Act requirements; provides technical support; analyzes legal and regulatory requirements including NSR, PSD, Title V, GHG, RHR, BART; maintains and updates emission inventory of air pollution sources on Navajo Nation.

Conducts site inspections and investigations of regulated facilities to ensure compliance with applicable regulations and permit requirements; observes process equipment and air pollution control equipment and records applicable operating parameters; reviews compliance certifications, monitoring reports and logs required for permits; audits performance testing at regulated facilities; prepares inspection reports; participates in follow up investigations and responds to complaints and emergencies related to air pollution; provides compliance assistance to regulated sources; 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 air quality 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.

Participates in regional studies, monitoring programs, policymaking, public hearings, meetings; conducts outreach; manages database of air pollution sources such as permit documents, compliance certificates, emission inventory and emission units; develops source category specific emission factors, regulatory analysis and reporting; provides training and assistance in permitting and compliance activities to technical staff.

KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:

Knowledge of the principles, practices and techniques applied in engineering as relates to air quality compliance.

Knowledge of Navajo Nation, local, state, federal regulations as relates to air quality.

Knowledge of techniques used in quantifying emissions and atmospheric transport theory, combustion emission factor development and combustion modeling, new source review (NSR) including prevention of

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significant deterioration (PSD), greenhouse gas (GHG), Regional Haze Rule (RHR) and best available retrofit technology (BART), and instrument set up and calibration.

Knowledge and understanding of air quality regulations, air emissions and emission reporting processes.

Knowledge of air quality related permits and environmental plans.

Knowledge of the application of engineering research and study methods.

Knowledge of computer hardware, software and peripherals.

Skill in establishing and maintaining effective working relationships with professional engineers, government agencies and the general public.

Skill in written and oral communications.

Ability to make technical computations and calculations involving the application of engineering principles.

Ability to read and understand plans and specifications and make factual comparisons to appropriate regulations.

Ability to pay attention to details.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Work requires attention to detail with potential exposure to loud noises, dust, toxic chemicals and fumes; requires travel to the field.

MINIMUM QUALIFICATIONS:

- A Bachelor's degree in Environmental, Chemical or Civil Engineering or related engineering field; and two (2) years of air quality permitting or compliance reporting work experience

PREFERRED QUALIFICATIONS:

- A Master's degree in Environmental, Chemical or Civil Engineering or related engineering field.
- Possession of an Engineer in Training (EIT) certificate.
- 24-Hour HAZWOPER or 40-Hour HAZWOPER (OSHA 1910.120).

SPECIAL REQUIREMENTS:

- Possess a valid state driver's license.

Supplemental Requirements:

Incumbent must obtain a Navajo Nation Vehicle Operator's Permit, and obtain EIT within 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.