

ENVIRONMENTAL HEALTH ENGINEER I

NATURE OF WORK

This is entry-level environmental engineering work.

Work involves responsibility for learning to: write federally approvable environmental permits for air, waste, wastewater and water; review facility plans and engineering specifications for construction and operation of community water supply systems, and community, industrial, or feedlot sewage treatment facilities; review engineering plans and industrial process to identify emissions/discharges and to determine appropriate pollution control equipment; recommend pollution prevention and risk reduction options; conduct monitoring strategies; model emissions/discharges; complete land use plan reviews to protect public health risks and environmental quality; determine business and industry compliance with environmental laws; assist in developing civil penalty orders. Independent judgment and personal initiative is expected when recommending technical solutions to environmental engineering problems in consultation with Senior Environmental Health Engineers. Supervision is received from a professional or an administrative superior and reviewed through written reports, conferences and results achieved.

EXAMPLES OF WORK

Learns to review Federal Clean Air Act Operating permits for Class I, complex Class II and Synthetic Minor Class II Air Pollution sources; Clean Water Act permits for industry, small communities and non-standard systems; and RCRA waste disposal site permits.

Learns to review plans for expansion, increased input or output, and changes in processes and chemicals.

Learns to review operating and construction permits, and proposed pollution control equipment under guidance from a Senior Environmental Health Engineer.

Learns to review engineering studies, remediation plans, and laboratory analysis used to: manage waste, clean up property, develop emission factors, discharge limits and testing plans.

Learns to use GIS software and environmental databases to review land use plans for water quality and quantity, air quality, and public health risk reduction.

Learns to conduct modeling, sampling and monitoring to identify public health and environmental risks/impacts.

Learns to conduct inspections of permitted facilities and investigate complaints.

Learns to organize and prepare enforcement actions.

Prepares special reports.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Some knowledge of environmental engineering principles and practices as they apply to public health, environmental quality, and pollution prevention.

Some knowledge of federal, state and local laws pertaining to environmental quality and environmental health.

Some knowledge of the principles and practices of toxicology, risk assessment and risk communication.

Ability to use internet search engines, computer word processing, spreadsheet, database and application development, graphing, various modeling, and GIS software.

Ability to use engineering mathematics and statistical analysis, analyze data, conduct modeling, provide accurate interpretation of results, and summarize the analysis into report format.

Ability to establish and maintain effective working relationships with other government agencies, citizen committees, elected officials, co-workers and the general public.

Ability to communicate effectively, both orally and in writing.

MINIMUM QUALIFICATIONS

Graduation from an accredited four-year college or university with major coursework in environmental, civil or chemical engineering; or any equivalent combination of training and experience that provides the desirable knowledge, abilities and skills.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid driver's license when operating a vehicle may be necessary to the satisfactory performance of assigned duties for some positions within this classification.