Class Code: 04522

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE

ENVIRONMENTAL ENGINEER SENIOR

DEFINITION

Develops engineering design standards and/or rules to support agency programs related to facility design and management; provides professional consultative engineering work for agency staff, other governmental agencies, private and public facilities and the general public in multiple facets of environmental engineering; functions as leadworker with responsibility for a major portion of a pollution prevention or environmental control program; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Assists supervisor by instructing employees, answering questions and distributing, balancing and checking work; may make suggestions on selection, promotions and reassignments.

Coordinates inspections and investigations of pollution sources, treatment systems, proposed facility sites, existing buildings or energy systems to determine compliance with applicable regulations, verify characteristics of a site, or to give technical assistance on various environmental or energy related issues; conducts inspections of complex facilities; may make commitments for employing agency in area of expertise up to making policy determinations.

Prepares complex or multi-phased oral, written or statistical reports using computer software, to disseminate or explain information to various public or private entities or individuals; determines contents of major agency reports and acts as project leader for the compilation of work done by lower level staff.

Develops, implements, or reviews departmental rules, design standards and guidelines relating to the assigned program area; assists in the development of engineering design standards that reflect sound engineering practice and are justifiable as minimum requirements for adequate construction or performance.

COMPETENCIES REQUIRED

Knowledge of engineering principles, practices, and methods and their application to environmental or energy related issues.

Knowledge of the fundamentals of a natural science as they relate to environmental, pollution prevention or energy issues.

Knowledge of state and federal environmental or energy regulations.

Knowledge of engineering and surveying techniques and instruments.

Knowledge of computer data analysis and report generation.

Knowledge of math principles and predictive models.

Ability to use computers, computer software, to update computer data and generate reports.

Ability to perform complex mathematical calculations.

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

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

Ability to understand and interpret public health, environmental, or energy related regulations.

Ability to apply technical knowledge to problems and arrive at the most effective and economical solution.

Ability to collect and organize engineering and technical facts and data and to present those facts, data, and conclusions clearly and concisely, both orally and in written reports.

Ability to prepare accurate reports, tables, charts, and maps for the interpretation or presentation of data, findings, or analyses.

Ability to provide work guidance to professional or technical personnel on a project basis.

Ability to make decisions in potentially stressful situations.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing polite, quality professional service.

Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.

Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization.

Exchanges information with individuals or groups effectively by listening and responding appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited college or university with a Bachelor's Degree in Environmental, Sanitary, Civil, Chemical, Nuclear, Mechanical, Industrial, Agricultural, or Public Health Engineering and three years of full-time professional work in environmental engineering;

OR

an equivalent combination of education and experience substituting thirty semester hours of accredited graduate level course work in Environmental, Sanitary, Civil, Chemical, Mechanical, Industrial, Agricultural, or Public Health Engineering for each year of the required experience to a maximum substitution of two years;

OR

licensure as a Professional Engineer by the Iowa Board of Engineering Examiners.

NOTE

Licensure as a Professional Engineer to practice in Iowa may be required at the option of the employing department within one year of employment.

Effective Date: 04/10 SH