Hydrologist IV

GENERAL DESCRIPTION

Performs advanced (senior-level) hydrological work. Work involves overseeing the collection and analysis of data and samples for technical reports and projects, overseeing inspections and ecological or environmental impact studies, and ensuring compliance with applicable statutes and regulations. May supervise the work of others. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Oversees inspections and the evaluation of data for compliance with laws, regulations, and specifications.

Oversees and monitors studies on quantities, distribution, disposition, and development of underground and surface waters.

Oversees technical projects, design plans, and the execution of estimates and calculations.

Coordinates and evaluates the collection of chemical, physical, biological, and hydrological data for use in water quality, water resource management, ecological risk assessments, and the development of program or project recommendations; ensures that quality control standards are met.

Coordinates and/or conducts scientific hydrogeological investigations to ensure that accurate and appropriate information is available for use in water resource management decisions.

Analyzes and interprets environmental data to determine existing conditions, long-term trends, compliance with quality assurance requirements and permitting standards, and environmental impact.

Evaluates and analyzes water samples as part of field investigations and/or to validate data from automatic monitors.

Researches and evaluates public water supply issues, including flood and drought risks, water quality, wastewater, and impacts on wetland habitats.

Interprets and researches laws, regulations, and policies; and delivers responses to the public and governmental agencies.
Reviews the activities of contractors, operators, and civic authorities.

Prepares and presents technical evaluations, plans, and reports on programs and complex issues.

Develops or uses hydrologic models for application.

May supervise the work of others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in hydrological work. Graduation from an accredited four-year college or university with major coursework in hydrology or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of hydrological principles, techniques, and procedures; of mathematics and statistics; and of the practical application of hydrology, water quality, and water management technologies.

Skill in scientific data management, in collecting and assessing hydrological data, in applying modeling and statistical procedures, in the use of a computer and applicable software, and in the use of standard tools of the profession.

Ability to coordinate and oversee projects, to conduct inspections, to apply hydrological concepts, to communicate effectively, and to supervise the work of others.