

Code: 2386

Title: HYDROGEOLOGIST

SUMMARY: Performs groundwater management and monitoring activities which include hydrogeologic investigations, environmental sampling and monitoring (gas, soil and water), testing and analysis of groundwater occurrence/movement/quality, analysis of data, and preparation of related reports/recommendations/aquifer protection permit applications for Pima County facilities.

DUTIES/RESPONSIBILITIES: (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor)

Performs gas, soil, and groundwater monitoring activities for Pima County and conducts hydrogeological analysis and interpretation;

Collects, validates, analyzes, interprets, compiles, and summarizes hydrogeologic data related to groundwater quality and provides information to other departments, government agencies, consultants, contractors, and the public;

Investigates/analyzes the geology, hydrogeology, and surface hydrology of various sites within Pima County and prepares related reports;

Determines the requirement for, and design of, groundwater monitoring and production wells and supervises the drilling, installation, monitoring, and repair of the wells;

Schedules groundwater monitoring required for aquifer protection permits, determines the need for monitoring and sampling, and schedules monitoring activities;

Participates in meetings with government representatives to clarify and negotiate aquifer protection permit requirements and prepares permit applications for County wastewater treatment facilities and groundwater recharge projects;

Ensures compliance with State laws and regulations related to aquifer protection permits and groundwater quality issues;

Attends meetings with State and other agency representatives to justify hydrogeological studies and provide technical assistance;

Reviews contractor, consultant, agency, and engineering reports and proposals for production and monitoring of wells, wetlands, and groundwater recharge projects and makes appropriate recommendations;

Prepares budget for groundwater monitoring section and monitors expenditures;

Selects and orders sampling/testing equipment and maintains equipment;

Schedules personnel involved in field work sample collection and reviews data and reports generated;

Trains professional and support staff in collecting/monitoring well water samples and other hydrogeologic data at county facilities and recharge sites;

Samples, monitors, and classifies soils and sludges;

Performs computer modeling of hydrogeologic data and prepares related presentations;

Maintains a database of water quality information including well locations, elevations, groundwater elevations, flood prone status, and subsurface hydrology and geology;

Coordinates with an analytical laboratory to ensure samples are properly collected and preserved and to ensure that proper analyses are conducted.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles of groundwater hydrology, geology, and pollution source management;

- Federal, State, and local regulations governing groundwater quality and management; field investigation, sampling, and inspection techniques;
- techniques, procedures, and standards for conducting hydrogeologic investigations and gathering, analyzing, interpreting, and presenting data;
- automated systems, computer modeling techniques, and related software applications;
- equipment utilized in hydrogeological research and maintenance standards for equipment.

Skill in:

- applying investigative methods, techniques, and principles to hydrogeologic studies;
- gathering, calculating, analyzing, and interpreting hydrogeological data utilizing specialized equipment;
- researching, analyzing, and interpreting data and preparing reports and presentations on findings;
- reviewing hydrogeologic information for content and accuracy;
- communicating effectively;
- using automated information systems for research, analysis, modeling, database management, and report/presentation generation;
- training professional and support staff and scheduling activities.

MINIMUM QUALIFICATIONS:

EITHER:

(1) A Bachelor's Degree from an accredited college or university with a major in Hydrogeology, Geology, Geological Engineering, Groundwater Hydrology, Geological Science, Geoscience or Environmental Hydrology and four years of experience performing hydrogeological research, investigation, and groundwater quality management which includes experience working with automated systems to produce hydrogeological models, analyses, and presentations.

(Additional relevant education from an accredited college or university may substitute for two years of the aforementioned experience.)

OR:

(2) Eight years of professional experience performing hydrogeological research, investigation, and groundwater quality management studies which includes experience working with automated systems to produce hydrogeological models, analyses, and presentations.

OTHER REQUIREMENTS:

Licenses and Certificates: Possession of a valid Class D Arizona Driver's License is required at time of appointment.

Physical/Sensory Requirements: Positions within this classification may carry the risk of exposure to extreme climatic conditions and terrain, infectious diseases, bio-hazardous contaminants, and/or wastewater and sewage products, therefore, special medical screening prior to, or during employment may be necessary to ensure employee health and safety and individual safety and protective equipment may be required. All positions require the ability to lift up to seventy-five pounds for brief periods of time.

This classification is intended to indicate the basic nature of positions allocated to the class and examples of typical duties that may be assigned. It does not imply that all positions within the class perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Pima County

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