CLASS SPECIFICATION

Class Code:	3052
Date Est:	06/2002
Last Rev:	09/2015
Last Title Chg:	09/2015
FLSA:	Exempt
Probation:	12 months

HYDROGEOLOGIST

DEFINITION

Under general supervision, performs a variety of technical duties in the collection of hydrogeology and/or groundwater contamination data; maintains field equipment and workshop/lab facilities; provides project oversight of outside contractors; provides support with technical hydrogeology and/or contaminant hydrogeology data assessment in order to assist in project and program level decision making; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

A bachelor's degree from an accredited college or university in hydrogeology, geology, or a closely related field and one year of full-time experience as a Hydrogeologist; OR a master's degree in hydrogeology or a closely related field and six months of full-time experience as a Hydrogeologist; OR an equivalent combination of education and experience.

LICENSE OR CERTIFICATE

A valid driver's license is required at the time of appointment.

SUPERVISION EXERCISED

Exercises no supervision.

EXAMPLES OF DUTIES *(The following is used as a partial description and is not restrictive as to duties required.)*

Support geophysical and/or geotechnical data collection programs with respect to groundwater studies.

Perform water quality sampling using various sampling methods and equipment.

Perform data collection and validation activities and input data into spreadsheets and databases; including: groundwater elevations; pumping/flow rates and durations; and, water quality parameters.

Evaluate hydrogeologic and contaminant data as part of conceptual site model development.

Perform aquifer/well testing on municipal and domestic wells. Support interpretation of aquifer test results.

Prepare reports describing project activities and present results at internal, agency, and/or public meetings.

Monitor artificial recharge injection rates, water pressures, and water-level fluctuations.

Prepare contaminant iso-concentration contour maps of contaminant plumes, groundwater potentiometric surface maps, and hydrogeologic cross-sections.

Assess groundwater contaminant plume dynamics and make recommendations for management and/or mitigation of contaminant plumes.

Evaluate groundwater pumping data to delineate wellhead protection areas; assess groundwater capture; and assess plume capture and containment.

Assist with drilling programs including well design, development of well specifications, well construction, and well development.

Oversee work performed by well drilling contractors, log drill cuttings, identify types of geologic materials being drilled, and locate water-bearing zones.

Manage and maintain all field and laboratory equipment including inventory, equipment calibrations, and proper material and liquid disposal.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Full Performance *(These may be acquired on the job and are needed to perform the work assigned.)*

Knowledge of:
Department/division policies and procedures.

Computer software specific to the department/division/program.

Specialized data collection methods and instrumentation related to job assignments.

Principles and practices of project planning and coordination.

Ability to:
Make technical presentations.

Validate, review, and perform technical analysis of contaminant hydrogeology data (well pumping, groundwater elevations, and water quality data).

Develop hydrogeologic models.

Prepare contract specifications.

Perform technical analyses of hydrogeological data.

Entry Level *(Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)*

Knowledge of:
Geologic and hydrogeological concepts, principles and practices.

General principles of chemistry, mathematics and hydraulics as they relate to hydrogeology.

Well drilling operations and construction practices.

Groundwater, soil, and soil vapor sampling practices.

Aquifer testing methods.

General contaminant hydrogeology principles.

Database functions and operation.

Principles and practices of task planning and coordination.

Ability to:
Operate a personal computer and a variety of commercial software packages including spreadsheets and databases.

Operate and maintain a variety of sampling and monitoring equipment.

Organize and display data, perform basic statistical analyses, and develop valid conclusions.

Read, interpret and apply regulations, policies and procedures.

Communicate effectively, both orally and in writing.

Conduct safe, effective, and efficient field studies.

Maintain effective working relationships with outside contractors, the public, division staff and representatives of other departments.

SPECIAL REQUIREMENTS
Essential duties require the following physical skills and work environment.

Ability to sit for extended periods. Ability to frequently stand, walk, crouch, stoop and kneel. Ability to walk uphill and downhill. Ability to lift and move objects weighing up to 50 lbs. Ability to use water measuring devices such as submersible pumps, aquifer testing equipment and groundwater monitoring tools and equipment. Ability to use hand and power tools. Ability to use office equipment including computers, copiers, telephone and FAX machine. Ability to work under conditions involving exposure to moderate levels of dust and noise. Ability to work outdoors in various types of weather.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards.