

**SNOHOMISH COUNTY JOB DESCRIPTION**  
**ENGINEERING TECHNICIAN IV-WATER QUALITY**

Spec No. 3063

**BASIC FUNCTION**

This position provides field, laboratory, and related office support to various projects within Surface Water Management and other agencies. Duties include collecting and analyzing water samples, observing and recording physical conditions in natural drainage systems and storm sewers, and providing information about water quality, drainage system conditions, and applicable regulations in oral, written, and map formats.

**STATEMENT OF ESSENTIAL JOB DUTIES**

1. Operates, calibrates, and maintains water quality monitoring equipment such as pH meter, dissolved oxygen meter, conductivity meter, calorimetric test kits, and flow velocity meter.
2. Collects water samples from natural water bodies and storm sewers in accordance with quality assurance protocols and applicable safety and health regulations; transfers water samples to contract laboratories in accordance with chain-of-custody procedures.
3. Performs laboratory analyses for conventional water quality parameters and other parameters such as total petroleum hydrocarbons, in accordance with quality assurance protocols and approved analytical methods.
4. Compiles information into written and map formats from construction documents, drainage investigation reports, maps, and other relevant documents. Observes physical conditions in natural drainage systems and storm sewers, including: the presence or evidence of pollution, illicit discharges, improper connections to the storm sewer, and related conditions; identifies sewer facility materials and observes their physical condition; measures dimensions of drainage system elements and prepares system maps; records observations and takes photographs in accordance with field protocols; handles and stores field notes in accordance with information transfer protocols.
5. Reviews water quality data and observations from SWM work and from contract laboratories and makes judgments regarding pollution sources, potential water quality problems, and potential courses of remedial and preventative action.
6. Provides information about water quality, drainage system conditions, and applicable regulations in oral, written, and map formats, as requested by county staff and the public.

**STATEMENT OF OTHER JOB DUTIES**

7. Performs other duties as assigned.

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**MINIMUM QUALIFICATIONS**

Graduation from a two (2) year accredited program in civil engineering, civil engineering technology, geology, forestry, chemistry, biology, or other water-quality-related field of study; AND, two (2) years of combined experience in water-quality-related field and laboratory work; OR, any equivalent combination of education and experience which provides the required knowledge, skills, and ability necessary to perform the work. Must pass job related tests.

**SPECIAL REQUIREMENTS**

A valid Washington State Driver's License is required for employment.

**KNOWLEDGE AND ABILITIES**

Knowledge of:

- the sources of pollutants in aquatic environments and their effects on beneficial uses
- methods of operating and maintaining water quality monitoring equipment
- methods of collecting water samples for analysis of various parameters
- methods of analysis for conventional water quality parameters
- codes, regulations, and standard applicable to water quality
- safety considerations regarding working in streams, road right-of-way, enclosed sewer facilities, laboratories
- computer software programs

Ability to:

- enter information into the computer accurately and efficiently
- collect water quality samples in the field
- prepare, organize, and maintain accurate, complete, and legible field notes
- communicate effectively, both orally and in writing
- read and implement quality assurance and safety procedures in the course of job duties

**SUPERVISION**

The employee reports to a technical or professional supervisor as assigned. Employee may serve as a lead worker and be responsible for coordinating the work of other employees. Work is performed independently or as a member of a crew. Work is reviewed in progress or upon completion for accuracy and adherence to division engineering standards.

**WORKING CONDITIONS**

The work is performed in the usual office environment or in the field in varying weather condition. Employee is required to lift, move and carry objects between 20 - 50 pounds, crouch, crawl, kneel, bend, climb and balance. Employee may work alone at isolated field locations.

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Snohomish County is an Equal Employment Opportunity (EEO) employer.  
Accommodations for individuals with disabilities are provided upon request.  
[EEO policy and ADA notice](#)

Class Established: March 1994  
Previous Spec No. 420445  
Revised: May 2001  
EEO Category: 3 - Technicians  
Pay Grade: 238 Classified Pay Plan  
Workers Comp: 1501 Hazardous