

Certified Hydrogeologist (CHG) Examination Sample Questions

Example No. 1

A community is evaluating the feasibility of using wastewater to irrigate a local golf course. What regulatory requirement would prohibit the use of this method of discharge?

- A. Downgradient municipal supply well
- B. Potential degradation of groundwater quality
- C. Permeable bedrock underlying the golf course
- D. High percolation rates of soil at the golf course

Example No. 2

How would permeability be evaluated in the vadose zone at a proposed waste disposal site?

- A. Perform ground penetrating radar transects
- B. Perform a grid of percolation tests
- C. Perform laboratory testing of soil samples
- D. Perform trench explorations

Example No. 3

Soil and groundwater has been affected by solvents from a leaking underground storage tank. The client wants to remove the tanks and obtain closure soon. The site is underlain by 50 feet of silty clay with an interbedded sand layer at a depth of 20 - 25 feet. The depth to water is 22 feet. Which of the following methods should be used to achieve the client's goal?

- A. Extraction of soil vapor and groundwater using a dual-phase system from two downgradient wells and one upgradient well
- B. Extraction of groundwater from several wells within the plume with excavation to groundwater and soil removal at the source
- C. In situ enhanced bioremediation of soil and groundwater from evenly spaced wells within the property boundary
- D. Extraction of soil vapor and groundwater using air sparging from evenly spaced wells within the plume