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bridging; 2.3.3. Filtration; 2.3.3.1. Rapid sand filtration; 2.3.3.2. Backwashing; 2.4. Modeling and simulation of the physico-chemical processes for scaleup; 2.4.1. Introduction; 2.4.2. Operation of the treatment plant; 2.4.3. Measuring arsenic concentration in water; 2.4.4. Computation of percentage removal of arsenic; 2.4.5. Modeling and simulation of physico-chemical treatment process
2.4.5.1. Process kinetics and modeling basis2.4.5.2. Modeling the process; 2.4.5.3. Material balance for the oxidizer unit; 2.4.5.4. Component mass balance of arsenic; 2.4.5.5. Component mass balance of oxidant; 2.4.5.6. Material balance of the coagulator and flocculator; 2.4.5.7. Material balance for the sedimentation unit; 2.4.5.8. Filtration Unit; 2.4.6. Determination of the model parameters; 2.4.6.1. Computation of flow rate and concentration of oxidant; 2.4.6.2. Computation of root mean square velocity gradient (G) in the coagulator/flocculator
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Sommario/riassunto

Arsenic abatement from groundwater in locations with a central water distribution system is relatively simple. The real challenge is selecting the most effective and affordable treatment and scale up option for locations which lack the appropriate infrastructure. Groundwater Arsenic Remediation: Treatment Technology and Scale UP provides the latest breakthrough groundwater treatment technologies and modeling and simulation methods for project scale up and eventually field deployment in locations which lack the proper central water distribution system to ensure arsenic free groundwater. Covers