
Examination of macroscopic hydraulic conductivity evaluation method for bentonite mixed soil

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At a radioactive waste disposal site, the hydraulic conductivity of bentonite mixed soil is required to be 1×10^{-10} m/s or less with a macroscopic hydraulic conductivity. However, there is no standard method for calculating the macroscopic hydraulic conductivity. In this paper, we compared osmotic flow analysis and Dagan's formula as methods for calculating the macroscopic hydraulic conductivity. As a result, it was confirmed that osmotic flow analysis is more explanatory. In addition, it takes time to perform osmotic flow analysis at the time of implementation. Therefore, we examined a method to simplify the confirmation of the macroscopic hydraulic conductivity during the construction work. As a result, it was confirmed that the method of preparing a macroscopic hydraulic conductivity map before the implementation work is effective.
