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ABSTRACT

Title of Abstract : THE CONTROL STRATEGIES OF GROUNDWATER POLLUTION
IMPACT (Case Study Around the Burangkeng Landfill, Bekasi
Regency)
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Background : The activities of the Burangkeng landfill using the open dumping method will cause various impacts such as environmental, social, economic, and health effects on the residents living nearby. The issue examined in this study is the potential groundwater contamination that is still used by residents for daily needs.

Objective : The aim of this research is to determine the groundwater quality index, social, economic, and health impacts, as well as control strategies for the potential groundwater contamination.

Research Methods/ Implementation Methods : The method used is a mixed-method and SWOT analysis for the strategies formulation.

Results : The results showed that the current groundwater quality index is in a polluted condition, and it cause social, economic, and health impacts for the residents.

Conclusion/Lesson Learned : the strategies from the SWOT analysis results is about diversification with 4 strategies such as, the utilization and optimization of simple household-scale clean water treatment technology and the optimization of PAMSIMAS, transition of Burangkeng landfill system from open landfill to controlled landfill, revitalization of leachate treatment facilities at the Burangkeng landfill, and the establishment of regional regulations for the compensation.

Keyword : groundwater; water quality index; pollution; residents; SWOT