

Source water protection from pharmaceutical contaminants: assessment of environmental quality act 1974 and its regulations

ABSTRACT

Pharmaceutical contaminants have become a global “emerging pollutant”. Many countries developed various policies and technologies to deal with the problem. In Malaysia, there is no serious attention given to this problem in the Environmental Quality Act 1974 (EQA) and other regulations (Malaysian legislation). Therefore, pharmaceutical contaminants still enter the environment and affect human health through water consumption and water usage. In response to this problem, this study aims to analyse Malaysian legislation and to identify potential protection provided to protect source water from pharmaceutical contaminants. This study employed a qualitative approach. A systematic search was carried out on existing pharmaceutical-related Malaysian legislation. Later, content analysis was conducted to discover patterns and ideas within the existing legislation. This would determine the provisions that could assist the protection of source water from pharmaceutical contaminants. The findings of this study demonstrate only few provisions addressed the problem of pharmaceutical contaminants and thus, this type of contaminant continues to harm the environment. It is hoped that the result of this study could enhance Malaysian legislation pertaining to the problem and minimise the risk of pharmaceutical contaminant in drinking water.

Keyword: Drug disposal; Emerging contaminant; Environmental Quality Act; Malaysia; Pharmaceutical residues; Source water; Waste management; Water pollution