

Brine Waste from Seawater Desalination in Malaysia

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Abstract : Water scarcity is a growing issue these days. As a result, saltwater is being considered a limitless supply of fresh water through the desalination process, which is likely to address the worldwide water crisis, including in Malaysia. This study aims to offer the best management practice for controlling brine discharge in Malaysia by comparing environmental regulations on brine waste management in other countries. Then, a survey was distributed to the public to acquire further information about their level of awareness of the harmful effects of brine waste and to find out their perspective on the proposed solutions to ensure the effectiveness of the measures. As a result, it has been revealed that Malaysia still lacks regulations regarding the disposal of brine waste. Thus, a recommendation based on practices in other nations has been put forth by this study. This study suggests that the government and Malaysia's environmental regulatory body should govern brine waste disposal in the Environmental Quality Act 1974. Also, to add the construction of a desalination plant in Schedule 1 of prescribed activities was necessary. Because desalination plants can harm the environment during both construction and operation, every proposal for the construction of a desalination plant should involve the submission of an environmental impact assessment (EIA).

Keywords : seawater desalination, brine waste, environmental impact assessment, fuzzy Delphi method

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