

The Environmental Management of Airport Water Supply Resilience

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Abstract

In developing airports, one of the operational support facilities that must be fulfilled in order to support its function is provision of clean water facilities. Clean water facilities provided must be able to fulfill the activities of entire airport area. Reliability of clean water facilities in airport includes availability of clean water sources in accordance with airport water demand projection to ultimate condition, having an integrated clean water network, and having a back-up supply that will be used for airport operations or inside emergency state. In conducting a study of resilience of clean water supply to airports, the approach used is a quantitative approach. Descriptive analysis will be carried out to describe clean water supply system including the source and distribution of clean water in airport area. Furthermore, benchmarking will be used as an approach in determining water requirements and water resilience in airport area. The study included selecting a back-up system for clean water supply to maintain continuity of clean water supply. Considerations in determining water resources are based on quantity, quality, and continuity. Whereas, when viewed from considerations related to airport conditions, including location readiness, shelter capacity, readiness in cost aspects, and airport development plans and emergency history.

Keywords

Water Resources Management, Water Supply, Eco Airport