

UNEP resource and guidance manual for environmental impact assessment of desalination projects

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ABSTRACT

The United Nations Environment Programme (UNEP) developed and released a new guidance document on desalination in cooperation with the World Health Organization (WHO). The document assists project designers, consultants, regulators and decision makers to anticipate and address all relevant environmental, socioeconomic and public health concerns that may arise when undertaking a desalination project for obtaining maximum beneficial use of the desalinated water in terms of quality, safety and environmental protection. This paper gives a short account of the guidance development process and summarizes the main results and recommendations. The UNEP document is divided into three parts. In part A, an introduction to the concept, methodology and practice of environmental impact assessment (EIA) is given and a 10-step EIA approach is proposed. Part B outlines a possible modular structure of an EIA report and gives an overview on a wide range of thematic issues that may be relevant to desalination projects. Part C discusses the potential impacts of desalination plants on the environment, based on a comprehensive literature review, and evaluates the identified impacts in terms of significance and relevance for EIA studies.

Keywords: Desalination; Environment; Socioeconomic; Health; Impact assessment; EIA; UNEP; WHO

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