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## ACCEPTED MANUSCRIPT

#### An interval-valued triangular fuzzy modified multi-attribute preference model for prioritization

#### of groundwater resources management

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Abstract: This study aims at developing an inexact interval-valued triangular fuzzy based multi-attribute preference model (IVTF-MAPM) method for supporting the selection of remediation strategies of groundwater remediation. The introduction of interval-valued triangular fuzzy parameters into the attributes makes it possible for dealing with multiple uncertainties existing in many real-world cases, considering more possible values and expressing the decision making information more precisely. A attribute system which consists of fifteen remediation alternatives with respect to ten attributes in each period were taken into consideration assessment of the technologies for groundwater remediation. The pairwise comparisons between the alternatives were expressed by the valued preference model and the weights of the attributes were scored by interval Analytic Hierarchy Process. After the modeling formulation, a chlorhydrocarbons-contaminated groundwater management system was provided to demonstrate the applicability of the developed method. Final results showed that A14, A3, A9 and A1 Download English Version:

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