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### **DEVELOPMENT OF A FRAMEWORK FOR SUSTAINABLE REMEDIATION DECISION MAKING (SRDSS)**

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**ABSTRACT** There is an increasing demand for cleaner technology use in remediation. Green remediation and sustainable remediation have been identified as approaches to satisfying the need for cleaner remediation. Sustainable remediation technologies initiative (SRTI) has developed a set of criteria and indicators for sustainable remediation technologies. In this research, a multi-attribute decision analysis based approach is used in developing a support system for sustainable remediation decision making. The methodology requires the user to input data on the sixteen SRTI developed indicators grouped into technical, economic, environmental and socio-cultural criteria to assess the sustainability of any remediation method. The five parts output platform then ranks remediation techniques being assessed according to their technical, economic, environmental, socio-cultural and overall performances. This DSS helps policy makers, consultants, contractors and other stakeholders to choose which of the various remediation methods to use for a remediation project on the basis of their sustainability. In this way, SRDSS fosters the use of economically sound and socio-culturally compatible clean technology in remediation

**Keywords:** Sustainable remediation, Green remediation, DSS, Cleaner technology, MCDA.