

## **Research on Risk Assessment Method of Groundwater Contamination in the typical Alluvial-Pluvial Fan at Tibetan Plateau**

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Groundwater pollution risk evaluation is a scientific management of groundwater resources, groundwater pollution prevention as well as the necessary means of regional environmental planning. But researches on the Tibetan Plateau are so little that this essay studies on the risk assessment of the typical alluvial--pluvial fan groundwater contamination. This study aims to develop a new field-based approach that can estimate patterns of groundwater pollution sensitivity at the Tibetan Plateau. This essay is based on the UNESCO's contamination risk assessment system, with a combination of alpine-cold characteristics, arid characteristics and hydrogeology parameters, environmental characteristics, to optimize this risk evaluation system and construct groundwater pollution evaluation system with Tibetan Plateau alluvial geographical features. ArcMap software was used to carry on graphics overlay spatial processing and the Natural Breaks classification module to classify evaluation grade. The results of this study demonstrate that the proposed model can provide more accurate and consistent estimates of groundwater vulnerability to the Tibetan Plateau alluvial--pluvial fan compared to the existing models.