

## Study on Potential Effect of Natural Phenomena on a HLW Disposal System -Stylization of Geological Environment Evolution

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The purpose of this research may arrange the relation between a natural phenomenon and Thermal - Hydrological - Mechanical - Geochemical (hereafter, T-H-M-C) intelligibly, the characteristics which actual natural phenomena have, such as a style and a scale, are understood, grasped and arranged.

It is arranging the relationship of the characteristic of natural phenomena and T-H-M-C which are obtained by research of earth science for every viewpoints of those, and arranging the knowledge about the excess and deficiency of the information which is needed in order to evaluate the influence of the safety on a HLW disposal system by natural phenomena, or the research which becomes important from now on.

By such arrangement, it was able to become possible to arrange information already acquired in the research of earth science, such as data and knowledge, from a viewpoint of the reflection to performance assessment of a HLW disposal system, and the informational importance and informational excess and deficiency of the earth science was able to be clarified. About the importance of these profit information, the importance is examined by comparing with the information about the influence characteristic of T-H-M-C to examining whether it can be coped with by estimating the influence of the greatest to T-H-M-C from a conservative viewpoint, and the safety of a HLW disposal system etc., and suppose that it is reflected in the plan of future research etc.

While promoting information gathering arrangement for each element of every on a matrix from now on, the influence relation between the validity of the extracted viewpoint of the item of T-H-M-C is also considered.