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**EXPERIMENTAL RESEARCH ON DISPERSION
PARAMETERS OF GROUND WATER AROUND
THE AREA OF CIAE**

Yu Jun

Health Physics Department, China Institute of Atomic Energy

Abstract The dispersion are important parameters in modeling the migration of pollutant in the ground water. Due to the complexity of geological media, variant dispersion is expected according to the difference of the geological media. This paper introduces the work done in the CIAE to deal with the dispersion of ground water in the area, three parts are included in physical simulation in the laboratory column, tracer experiment in the field and the prediction of dispersion using the stochastic model. The following results are obtained:

(1) experimental results show that the dispersion obtained in the column are three orders of magnitude smaller than that obtained in he field;

(2) using the field values of conductivity and stochastic theory, the calculated asyinctotic longitudinal and lateral dispersion are 370 and 0.45 meters respectively and the correlation length is 400 meters approximately.

(3) the using of dispersion obtained from the formula in the paper can enhance the precision of the model prediction, the distance needed to reach the Fick's dispersion is 6 km approximately.