

ANALYSIS OF POLLUTION OF WATER ENVIRONMENT IN SOME RESERVOIRS OF CHINA

LU YAORU

The environmental pollution is troubling the world, particularly the water environment to be polluted is very easy happened in there, where the unfavourable impacts are causing by the waste water to be draining into surface and subsurface water without taking any treatment. To compare the water chemical contents in different conditions is useful to research the regional quality of water environment and the change of hydrodynamic and geochemical system influenced by artificial actions. The differential coefficient of water quality C_{qw} is given in the paper, and the water chemical contents in North Part of Shaan-Shan Gorge in the Yellow River are taken as the example, where the values of C_{qw} are mainly between 15.9%--154%. The Quality of reservoir water has always been deteriorated, and the differential hydrodynamic-chemical zones are formed. Usually it is able to separate into four zones, which are: A. upper reservoir water (absorbing heat) zone; B. middle reservoir water (changing temperature) zone; C. deep reservoir water (stable temperature) zone; D. bottom reservoir water (mixing temperature) zone. The water qualities in different belts of some reservoirs in Guizhou have been compared; the changes of water qualities in future reservoir of the Three Gorges Project are studied, and the related theoretic formulars are researched. By the analyses of isotopic nitrogen, the results are indicated that the polluted sources related to chemical fertilizers will not be neglect. In 21th Century, for the water environmental protection, it is need to develop the new organic and mineral fertilizers to instead the chemical fertilizers.