IRPA9
1996 International Congress on Radiation Protection
April 14-19,1996
Vienna, Austria

FORM FOR SUBMISSION OF ABSTRACTS
(Instructions for preparation on reverse)

FOR OFFICIAL USE ONLY
Abstract No.
Receipt
Author
Acceptance
Mini-Presentation

PAPER TITLE Research on the disposal methods of uranium-bearing spoils in Eastern China

AUTHOR(S) NAME(S) Zhang Hong,Ling Qingquan,Song Lanying,Lu Yong,Li Jian,Xu Yuancheng,

SUBMITTING AUTHOR

LAST NAME Zhang FIRST NAME Hong TITLE senior engineer

AFFILIATION IRPA member TEL (0791)6213980-243

STREET 114 West Beijing Road FAX (0791)6213980-216

CODE 330046 CITY Nanchang COUNTRY P.R.China

PRESENTING AUTHOR (IF DIFFERENT)

MAJOR SCIENTIFIC TOPIC NUMBER ..... (see page 7) 4.7

ABSTRACT (See instructions overleaf)

The spoils (produced by geological exploration,especially by tunnelling) in uranium deposit contain certain amount of uranium ore, it may have impact on the environment and pose a potential radiation health hazard to the public because of the presence of spoils piles, the amount of spoils at each site ranges from only residual contamination to 92 thousand tons in Eastern China. This paper develops a series of methods for the disposal of uranium spoils, such as applying an earthen cover to control release of radon because radon is the most hazardous constituent of uranium-bearing spoils, building drainage system to avoid water erosion and supporting to maintain the stability of spoils piles, which is based on the summarization of environmental impact analyses in 18 uranium deposits,various factors including health,resource, ecological environment protection and meteorological condition.

By the use of above methods that make the implymentation easily and less costly, we have finished the ultimate disposal of 21 spoils piles and gained ideal results that radon emission rate and gamma radiation are decreased significantly (achieving the demands of pertient standards),natural environment is restored fully, water erosion and misuse are avoided effectively .This paper also presents some data to evaluate the effect of remedial actions.