Contamination by arsenic and other trace elements in tube-well water and its risk assessment to humans in Hanoi, Vietnam

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Abstract: Concentrations of As and other trace elements and their association were examined in groundwater (n=25) and human hair (n=59) collected at Gia Lam District and Thanh Tri District, suburban areas of Hanoi, Vietnam, in September 2001. Concentrations of As in the groundwater ranged from Author Keywords: Arsenic; Barium; Groundwater; Hanoi; Human hair; Manganese; Vietnam Index Keywords: Barium; Groundwater; Manganese; Potable water; Risk assessment; Trace elements; Water wells; Hanoi; Human hair; Vietnam; Arsenic; arsenic; drinking water; ground water; trace element; well water; arsenic; groundwater; pollution exposure; risk assessment; trace element; article; concentration (parameters); dry weight; hair analysis; health hazard; human; human tissue; intoxication; practice guideline; risk assessment; Viet Nam; water contamination; world health organization; Arsenic; Barium; Drinking; Environmental Exposure; Family; Female; Fresh Water; Hair; Humans; Iron; Male; Manganese; Rain; Risk Assessment; Suburban Health; Trace Elements; Vietnam; Water Pollutants, Chemical; Water Supply

Year: 2006 Source title: Environmental Pollution Volume: 139 Issue: 1 Page : 95-106 Cited by: 47 Link: Scorpus Link Chemicals/CAS: arsenic, 7440-38-2; Arsenic, 7440-38-2; Barium, 7440-39-3; Iron, 7439-89-6; Manganese, 7439-96-5; Trace Elements; Water Pollutants, Chemical Correspondence Address: Tanabe, S.; Center for Marine Environmental Studies (CMES), Ehime University, Bunkyo-cho 2-5, Matsuyama 790-8577, Japan; email: shinsuke@agr.ehime-u.ac.jp ISSN: 2697491 CODEN: ENPOE DOI: 10.1016/j.envpol.2005.04.033 PubMed ID: 16009476 Language of Original Document: English

Abbreviated Source Title: Environmental Pollution

Document Type: Article

Source: Scopus

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