

Heavy metal contamination and the risk management in northern part of Mongolia

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Abstract

Japan-Mongolia joint investigation was carried out in some local communities involved in or affected by artisanal gold mining in northern part of Mongolia. Environmental specimens were collected and analyzed at NMCC through PIXE method. The authors expected high mercury values for specimens because artisanal miners *Ninjas* often use mercury. However lead and arsenic showed anomaly instead of mercury in many samples. Thus the authors calculated the health risk of lead in water, and concluded that the risk is high in the study area.