J Pollut Eff Cont 2018, Volume: 06
10.4172/2375-4397-C1-012

Assessment of contamination level and potential sources of heavy metals in soil from green spaces in Shiraz

Razieh Alamdar
Islamic Azad University, Iran

The present study investigates the distribution, contamination level and potential sources of heavy metals (HMs) in soil from green spaces in Shiraz, Southwest Iran. A total of 50 topsoil samples were collected and analyzed for Cr, Cd, Pb, Co, Zn, Cu, Ni and As. Principal component analysis (PCA), geographical information system (GIS) and enrichment factor (EF) were used for the source identification and prepare distribution maps of HMs. Also, the pollution index (PI) was used to assessment of contamination level of HMs. Results revealed that the contamination levels of HMs were in the descending order of Pb>Cr>Zn>Cu>Ni> Cd >Co>As. Moreover, based on principal component analysis (PCA) and enrichment factor (EF), Cr, Pb and Zn can be originated from human activities while Ni and Co came from geogenic sources. These results supply basic information of heavy metal contamination control and environment management in residential area.

Notes: