

## **A study of dust Caused By Placer Iron Ore mining Over Sangan area, Khorasan-e-Razavi Province, Iran**

P. POURAMIN<sup>1</sup>, E. SAADATI<sup>2</sup>, H. SAADATI<sup>3</sup>  
AND H.A. TORSHIZIAN

<sup>1</sup>Department of Geology, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran  
(pedrampouramin@gmail.com)

<sup>2</sup>Department of Geology, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran  
(parshoorakhsh.co@gmail.com)

<sup>3</sup>Parshoorakhsh Investment Group , Mashhad, Iran.  
(parshoorakhsh.co@gmail.com)

<sup>4</sup>Parshoorakhsh Investment Group , Mashhad, Iran.  
(h.torshizian@yahoo.com)

The study area is at the North East of Iran, in Sangan region from Khaf city. The climate of the region is predicted, based on Domarten is Meta-dry and Ambrjeh based on, desert moderated temperate. The main features of the weather shows, prevailing winds are from the Hindu Kush mountain range in Afghanistan. The wind speeds between 30 to 100 kilometers per hour, with an average daily rate of 80 kilometers per hour during the June to August. There is also known as the winds of 120-day has created problems for residents and wildlife that ranged from 15 May to 15 October is blowing mines placer, the phenomenon dust. This study was conducted to investigate dust at Sangan area, using individual and environmental sampling, the value of environmental dust and respiratory rate were measured and analyzed by XRD. The analysis result shows the presence of silica, sulfur, phosphorus and heavy metals, spatially arsenic in the dust. According to the above results, using practical and implementing methods to reduce the value of biotech cement in dust is Essential .