The Determination of Deposited Dust and Heavy Metals in the Industrial Area of Ferronikeli Smelter

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Received June 07, 2010; October 02, 2010

Abstract: In this scientific paper is presented the determination of deposited dust (aerosediment) and heavy metals in dust from air monitoring in the industrial area of Ferronikeli smelter, located in the municipality of Drenas of the Republic of Kosovo. The Ferronikeli smelter is one well known industrial complex for production of commercial ferronickel and as result of technological process applied ranged in heavy industries, so from production process expected that from its chimneys to release in air dust and other polluted substances, as well as heavy metals. The results presented in this paper are based on monitoring of the environment during the year 2008, where are shown results from these measurements and analyses for the quantity of deposited dust (gravimetric method), as well as the determination of heavy metals in dust with atomic absorber spectrometer (AAS). Monitoring includes the industrial area where lies Ferronikeli smelter (some points inside of smelter area) and some other monitoring points in urban area of Drenas (outside from smelter). Based on these data, it is evident the impact of Ferronikeli smelter on the environment, especially with emphasis on air.

Key words: deposited dust, heavy metals in dust, gravimetric method, X-Ray Fluorescence Spectrometry.

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