



The Impact of the Ferronickel Slag Use in Improving the Environmental Image and Properties of Consumables Layers of Asphalt Concrete

Izet Ibrahimimi^{1,*}, Musa Rizaj², Agim Ramadani³,

¹*Korporata Energjetike e Kosovës, Prishtinë-Kosovë;* ²*PrishtinësUniversity, Xehëtarisë dhe Metalurgjisë Faculty, Mitrovicë-Kosovë;* ³*Xella-Kosova L.L.C. Lipjan-Kosovë*

Received April 05, 2011; Accepted March 05, 2012

Abstract: Increasing requirements for metallurgical products has increased the volume of waste dumps. Uncontrolled dumping and mismanagement has increased their irrational use of resources and generating enormous concentration of pollutant components. Without the possibility of exploitation and management of slag deposits in the Foundry of "Ferronikeli" in Drenas the Republic of Kosova, has resulted in increasing concentrations of polluting components. Volume of over 2.6 mil m³ of deposits of this clinker being under exposure to precipitation and wind have appeared highly skilled in emissions and thus are turned into permanent environmental pollutants. European requirements for alignment with EU directives on environment, rational use of resources and requirements of technical specifications for qualities (composition and features) of the consumables layers of asphalt concrete has encouraged our approach to the deepening of research in this area. The research model is based on a method known from literature, reviews Marshall experimental method, and uses the experiences to date in qualitative and quantitative assessments of metallurgical clinker. The aim of our research consists in argumentation of the possibility of transformation of slag from potential pollutants on new used material and its promotion as alternative raw material for the production of consumable layers of asphalt concrete for highway.

Key words: *clinker, pollution waste, resource preservation, asphalt concrete,*

*Corresponding: E-Mail: izet.ibrahimi@kek-energy.com, Tel: +37744174286; Fax: +38138580164