

By changing the waste physical character, the application of solidification prevent the occurrence of large amounts of seepage water at the landfill, with a high content of hazardous and harmful components, thus achieving a double effect, environment protection, and on the other hand reduction of the economic impact of the hazardous waste disposal process, because there is no need for the installation and operation of the waste/seepage water treatment system from the landfill. The selection of stabilization and solidification processes, that is additives, is one of the key elements that have most influence on the efficiency of the applied procedure. For this reason, the most important step in the stabilization and solidification of waste material represents a qualitative and quantitative analysis of waste material, based on which, the selection of the right additives for S/S process may be performed.

The paper, written by V. Gardic, Lj. Obradovic, S. Filipovic, explains stabilization and solidification of hazardous waste methods, depending on the type of waste, and the content of hazardous and harmful components, as a method of pre-treatment of hazardous waste before disposal to landfill. The influence of additives on the efficiency of the S/S processes, depending on the type of waste, the conditions of aging the S/S process product, is shown. The efficacy of S/S process was measured by the mobility of hazardous and harmful components after the solidification/stabilization. It may also be seen, the representation of stabilization and solidification processes in the process of pre-treatment of hazardous waste before its disposal. There are also systematized data related with the processes of stabilization and solidification, with the aim of selecting the optimal process for further research in the field of reducing the impact of waste generated, as a result of mining activities on the environment.

Stabilization and solidification are processes in which the application of physical and chemical properties of cementitious binders, or chemical transformation with the help of the additives, reduces the mobility of hazardous and harmful substances from waste. The most important information about this material is that its deposition without pre-treatment, is strictly prohibited.

The efficacy of S/S process is reflected in a significant reduction of the negative impact of disposed waste in the environment, and indirectly on wildlife and human health. The main goal of the paper is systematization of data, and the selection of the optimum S/S processes for further researches in the field of reducing the impact of waste, occurred as a result of mining activities, on the environment.