Some Examples of GIS Software for the Display of Information Related to Mining Activities

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Abstract

The use of Geographical Information Systems (GIS) to display data contained in regional databases is a rapidly growing technology. The selection of a GIS software package for a particular purpose is extremely important. The ultimate end user must be made aware of not only the cost in obtaining a GIS license but also of the computer hardware requirements. The user should be cognizant of computer memory and storage mandates, data retrieval methods. database entry and file management protocols in addition to display modes options. Accessory hardware such as digitizers, plotters, and graphics drivers must also be considered. The ultimate data management GIS package is ARCINFOR which requires a mainframe computer system and a tremendous amount of storage and CPU time. A Map package developed by the Statistical Analysis System (SASR) Institute requires a mainframe system for its most efficient productivity but can be utilized on a microcomputer or workstation. The advantage of the SAS package is the ease with which it can be learned and put into use. Microcomputer GIS packages require more training time but once learned can be used with proficiency. This exhibit shows the output from various GIS software packages illustrating some potential uses in the display of mine information such as general mine information, overburden drill cores, and watershed chemistry.

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Poster Session presented at 1991 Surface Mine Drainage Task Force Symposium, April 3-4, Morgantown, WV 26505. Sponsored by the WV Surface Mine Drainage Task Force and the WV Mining and Reclamation Association.