

TITLE: ENSURING A HEALTHY ENVIRONMENT FOR WORKERS

AUTHOR: DANIEL, J. H., USBM

CONTACT: Daniel, J. Harrison (202) 501-9309

ABSTRACT:

Lung disease caused by dusts and particulates is the major workplace hazard of all industrial workers, ranking ahead of musculoskeletal injury and heart disease. The particulates causing lung disease, which cannot be seen by the human eye, have just recently become the subject of environmental regulation. Air quality health research of the Bureau of Mines focuses on the monitoring and control of these small particulates, which include coal and rock dusts, diesel soot, and radiation. Research strives to control the particulates at their source of generation; hence, it is a true worker health and environmental program. This research is becoming more important since current and proposed Federal regulations controlling airborne contaminants are ahead of the technology to sample, measure, and control many of the substances.

Due to the confined, dusty, humid, and often hot mine environment, the technology developed by the Bureau has application to the most difficult industrial and environmental air quality problems. The presentation will describe the Bureau's air quality research and how it helps ensure the technical and economic feasibility of the growing list of rulemaking legislation involving air quality.

TITLE: IAML INVENTORY & HAZARD EVALUATION AND COST ESTIMATION

AUTHOR: DAVIS, J.D., BOM

CONTACT: Davis, John (202) 501-9749

ABSTRACT:

Because of recently enacted environmental regulations, many groups, including land managing agencies, are increasingly concerned about the environmental and physical hazards and legal liabilities of inactive and abandoned mines. Accordingly, in order to gain an understanding of the scope and magnitude of problems, a number of previous studies were evaluated in comparison with the Bureau of Mines data bases, in an attempt to identify the number of sites, determine the number of features per site, identify the frequency of environmental and physical hazards, determine the average cost per hazard and thus the average cost per feature and finally, estimate the cost per site.

The number of total sites on federal lands is estimated to be between 114,000 and 136,000. These sites contain an estimated 158,000 to 1,289,000 physical hazard features, that will require between \$2.5 billion and \$21 billion to remediate. The number of sites requiring environmental remediation is estimated at 1750 to 5000. This will require an additional \$3.8 billion to \$13.7 billion to cleanup. The total cost of cleaning up the federal lands is estimated to be \$6.3 billion to \$34.5 billion.

U.S. DEPARTMENT OF THE INTERIOR
CONFERENCE ON THE
ENVIRONMENT AND SAFETY

APRIL 24-28, 1995

ABSTRACT BOOK

Sponsored by the U.S. Bureau of Mines

