



We provide technical assistance

Bob Welsh is a geologist based in the Western Regional Coordinating Center in Denver where he serves on the Technical Information Processing System (TIPS) National Team. Bob is a certified Global Positioning System instructor who has trained over 250 state and federal scientists in this emerging technology in the last five years. He provides Global Positioning System and computer expertise to state and Office of Surface Mining offices through the TIPS program.

Bob holds B. Sci. and M. Sci. degrees in Geology, and was raised in the Western Pennsylvania coal country. He has been with the Office of Surface Mining for 13 years in Pittsburgh and Denver and an additional seven years with the U.S. Bureau of Mines. Bicycling, youth sports, and travel are among his other interests.

Bob adds, "I enjoy the one-on-one contact with state professionals in my training and technical assistance experiences. I feel that I can make a difference by giving them better tools to do their jobs."

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We provide support to technical staff

Kate Smith is a Program Assistant in the Charleston Field Office. She began working for the Office of Surface Mining in 1978 where she served as Secretary for the Technical Services staff. In 1982, Kate became a Legal Clerk with the Field Solicitor's Office where she continued to work closely with coal mining and reclamation issues. She returned to the field office in 1989. What began as a regulatory program assistant job eight years ago has become a position that provides a myriad of services to the regulatory, Abandoned Mine Land, and administrative staff. Her responsibilities now include preparation of Freedom of Information Act and Congressional responses, and administrative activities. Kate also serves as the Equal Employment Opportunity Counselor for the field office.

Kate and her husband, John, consider themselves to be rock and roll aficionados. In the last couple of years, they have traveled to surrounding states to see the Rolling Stones, Bob Seger, Paul McCartney, Elton John, Tina Turner, the Band, and Aerosmith.

We convene technical workshops



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Technology development and transfer

These program areas are focused to assure the states, Indian Tribes, federal agencies, industry, and citizen organizations have the necessary level of understanding to implement the Surface Mining Law. This includes a technical knowledge needed to protect the public, property, and environment during mining and reclamation and to restore damaged coal mined lands and waters to productive use.

Technical Assistance

The Office of Surface Mining provides technical assistance to the coal states, tribes, and industry to improve the effectiveness of the regulatory process. Although it deals mainly with regulatory functions, technical assistance also supports the Abandoned Mine Land program. Technology transfer has generated an atmosphere for resolving more problems through technical assistance, rather than oversight.

Since 1995 the seven Western states of Alaska, Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming along with the Office of Surface Mining have collaborated through their participation in the Western Regional Technical Team. Prioritization of topics and issues led to an Office of Surface Mining-sponsored Bond Release Forum that addressed issues related to the 10-year bond release period required in the west. As follow-up to the Forum, an Applied Statistics for Arid and Semi-arid Lands Workshop was held to address specific statistical issues. As part of this work the Office of Surface Mining established an on-line communication Listserve Group (Minebonds) as an outreach initiative to provide on-line communication for discussion and technical assistance on bonding issues. These successful activities will be followed by a second workshop and forum in 1998.

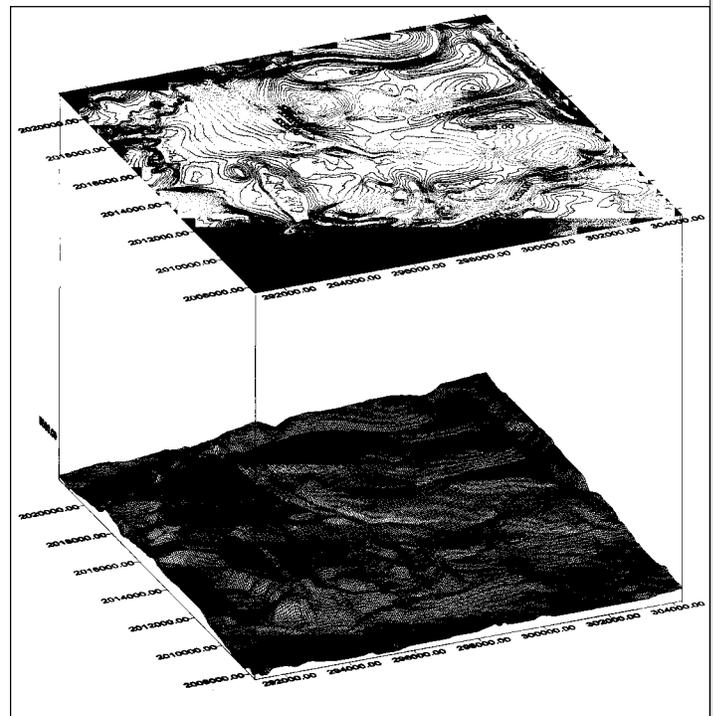
The Office of Surface Mining is coordinating a working group developing a handbook with guidelines on how to apply the U.S. Department of Agriculture's Revised Universal Soil Loss Equation to mined lands, construction sites, and reclamation areas.

The Office of Surface Mining continues working under a three-year technical assistance agreement with the Bureau of Environment and Technology of the Indonesian Ministry of Mines and Energy. Professional staff members from the Ministry attended training courses offered by the Office of Surface Mining on such topics as reclamation bond calculation, erosion and sediment control, and

operation of the Technical Information Processing System (TIPS). Office of Surface Mining personnel traveled to Indonesia to provide on-site assistance in the areas of inspection practices, permit processing, and program management. Under the Indonesian agreement, which is funded by the World Bank, all work by the Office of Surface Mining is done on a 100 percent reimbursable basis, including reimbursement of overhead costs.

Technical Information Processing System (TIPS)

The Technical Information Processing System is a computer system designed by the Office of Surface Mining in partnership with primary states. TIPS is maintained by the Office of Surface Mining for use by state regulators and the Office of Surface Mining staff, to carry out the technical regulatory and abandoned mine land responsibilities of the Surface Mining Law. The system consists of a centrally-located computer networked through the Office of Surface Mining wide-area network, with engineering/scientific work stations in state, tribal, and selected federal offices.



We use current technology to implement the Surface Mining Law

TIPS aids the technical decision-making associated with conducting reviews of permits, performing cumulative hydrologic impact assessments, quantifying potential effects of coal mining, measuring revegetation success, assisting in the design of abandoned mine lands projects, and preparing environmental assessments and environmental impact statements. TIPS activities in 1997 included installation of systems for the Navajo Nation. Training of state, tribal, and Office of Surface Mining personnel in the practical application of TIPS is performed on a continuing basis. In 1997 training was provided for surface-water modeling, three-dimensional spatial geologic and toxic-material modeling, geographic information system use, slope stability, statistical analysis, and global positioning system uses. Technical training on TIPS software applications reached over 280 state and Office of Surface Mining scientists in 41 courses during 1997. In 1997, TIPS was instrumental in the deployment of electronic permitting hardware and software and in the development of Geographical Information System capabilities for coal mines on Indian lands. In 1997, TIPS

workstations were installed in the offices of the Hopi and Navajo tribes. In addition, as part of the Office of Surface Mining's Indonesia project, TIPS provided training to Indonesian government staff on a TIPS workstation delivered earlier in support of Indonesia's effort to develop a mining regulatory program .

Acid Drainage Technology Initiative

Under the Office of Surface Mining leadership, this initiative provides a forum to identify and implement scientific solutions to acid mine drainage problems. The initiative is a joint venture of the National Mine Land Reclamation Center at the University of West Virginia, Interstate Mining Compact Commission, National Mining Association, and the Office of Surface Mining. A principal goal of the initiative is to develop more reliable premining predictive testing procedures and improve the validity and reliability of field and laboratory data. Another goal is to develop standardized procedures and techniques to prevent the formation of acid mine drainage during mining operations.

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We teach blasting requirements needed to stay within safe limits and obey the Surface Mining Law

Training

During 1997, nationwide training continued for federal, state, tribal, and private surface coal mining regulatory and reclamation personnel. The technical training program is a cooperative effort of state, tribal, and Office of Surface Mining offices. All program offerings are taught by teams of state and Office of Surface Mining staff. In 1997, a total of 106 instructors contributed to the program with 50 percent of the instructors from the Office of Surface Mining, 39 percent from 17 states, eight percent from the Solicitor's offices, and three percent from other sources.

In 1997, 1,010 participants attended the 57 sessions offered for 27 courses held at 25 locations in 14 states. State and tribal students accounted for 68 percent of program attendance, Office of Surface Mining personnel for 28 percent, and private four percent. The 27 courses offered in 1997 included: three Acid-Forming Materials courses: Fundamentals, Principles and Process, and Planning and Prevention; four Abandoned Mine Land Project Design workshops: Dangerous Highwalls, Dangerous Openings, Landslides, and Subsidence; two Bonding Workshops: Administrative/Legal and Cost-Estimation; Administration of Reclamation Projects; Applied Engineering Principles; Blasting and Inspection; Effective Writing; Enforcement Procedures, Erosion and Sediment Control, Evidence Preparation and Testimony; Expert Witness; Historic and Archeological Resources; Instructor Training; NEPA Procedures; Permitting Hydrology; Principles of Inspection; Soils and Revegetation; Spoil Handling and Disposal; Surface and Groundwater Hydrology; Underground Mining Technology; and Wetlands.

Two new Abandoned Mine Land Project Design courses (Landslides and Subsidence) were added and several courses including Underground Mining, Effective Writing, and Applied Engineering Principles were revised to better meet student needs.

The training program will offer a full schedule of 27 courses in approximately 55 sessions in 1998. Forty-seven of those sessions will be scheduled at the beginning of the year, and additional sessions will be scheduled as needed to meet special needs identified by program customers during the year. To meet demand for training by industry and the public, the program will conduct workshops at broadly attended national meetings such as the American Society for Surface Mining Reclamation and the National Abandoned Mine Land programs Annual Meeting.

The Office of Surface Mining has recognized a need for training staff in trust responsibility to American Indian Tribes and has initiated a plan to cooperate with other Interior Department bureaus in the development of a comprehensive training course. The objectives of this training program include: 1) to describe the Interior Department's trust responsibilities and each bureau's policies and procedures for fulfilling those trust responsibilities; 2) to ensure that the cooperating agencies are aware of what their responsibilities include and are operating from an understanding in common; and 3) to develop a comprehensive resource handbook to be used as a desk reference manual. The Office of Surface Mining will participate in this department-wide Indian Trust Responsibility Training Program that will include the Bureau of Land Management, Bureau of Indian Affairs, Minerals Management Service, Solicitor's Office, and the Office of American Indian Trust.



We see on-the-ground results from our technical assistance

David Best is a Civil Engineer in the Mid-Continent Regional Coordinating Center and has been with the Office of Surface Mining for 12 years in Knoxville, Tulsa, and Alton. Prior to joining the Office of Surface Mining he worked for the Tennessee Valley Authority. His work entails providing technical assistance to the three field offices and eleven states within the region. David provides expertise on bonding, siltation structures, blasting, roads, and materials handling. He represents the Mid-Continent Region on the Nationwide Blasting Work Group and the Dam Safety Team. He is also the regional coordinator for the Appalachian Clean Streams and American Heritage Rivers Initiatives.

David says, "I enjoy working with the states and field offices within the region. The varied technical challenges keep me busy and with the ability to provide technical assistance directly to the states, I have the ability to influence the front-line technical personnel to approve better mining and reclamation plans."



We implement the Appalachian Clean Streams Initiative

Jim Taitt is the acid mine drainage coordinator for the Appalachian Regional Coordinating Center, with responsibilities of developing and maintaining partnerships with state and federal agencies in support of the Appalachian Clean Streams Initiative.

Jim is a Vietnam Veteran and has a B.A. in political science and a M.A. in public policy. His thesis was on environmental regulatory programs and their implementation at the state and federal level. The primary focus was on the Office of Surface Mining 1977-1980.

In 1980 Jim joined the Office of Surface Mining in Charleston as a Federal Lands Specialist with responsibility to establish policies and procedures for federal permitting, the lands unsuitable process, and valid existing rights determinations. After transferring to Pittsburgh he was instrumental in getting the Clean Streams Initiative started in 1994.

Jim is an avid bass fisherman and skilled cabinet maker.