

Appendix B: Federal Surface Mining Control and Reclamation Act (SMCRA) of 1977

While this guide deals with cleaning up contaminated coal mine drainage (CMD) at abandoned mines, it is appropriate to mention the role of prevention. Coal is still being mined in Appalachia and elsewhere, it is important to ensure that CMD problems at these sites are prevented. Citizens can be valuable partners to public agencies charged with the authority and responsibility for regulating mining activities. SMCRA allows citizens to monitor and become involved in permitting processes, thereby helping agency personnel and mine operators ensure that current and future operations are performed in an environmentally responsible manner.

The Provisions of SMCRA

- ♦ SMCRA regulates all ongoing (i.e., active) coal-mining operations in the United States, as well as the surface effects of underground mining. The law also applies to coal preparation and processing facilities, waste piles and loading operations located near mines. Mines that produce less than 250 tons of coal per year, recover coal as a secondary product, extract coal only for the operator's personal use, or function as part of a government-funded construction project are the only exceptions to SMCRA's provisions.
- ♦ Under SMCRA, an individual state can assume the role of primary regulator if it can prove its oversight programs are at least as comprehensive as those of the federal OSM. The law further requires that all operators obtain a permit from the state mining agency to extract coal. Permits must contain detailed information on the geological characteristics of the affected land, its ecology and hydrology, the operator's legal and financial status and history of compliance with mining laws, and plans for mining and final reclamation operations. If sample analyses are required, particular attention should be paid to geological analyses that characterize the acid-forming potential of each stratum

of overburden. Samples analyzed should be spaced so that an accurate representation of the site is developed and the chemical analysis can be performed. Plans for handling potentially acidic, alkaline, or toxic waste materials must ensure that CMD will not be produced to the point where it condemns the operation to perpetual treatment.

- ♦ Regulatory agencies are required to certify that operators can fulfill their obligations under the law and successfully reclaim their sites before issuing permits. Bonding and insurance are also required to provide financial assurance that money will be available to correct any problems or cover any damages if an operator encounters financial difficulty or abandons the site. The importance of ensuring that adequate bonding and insurance provisions are included in mining permits cannot be overstated.
- ♦ SMCRA also requires operators to minimize disturbances to surface streams and groundwater systems, to restore approximate original contours of the land, and to reclaim the area upon completion of mining activities. Inspection and enforcement provisions focus on reducing threats to public health and the environment through the oversight of state and federal agencies. The law also designates some lands as unsuitable for mining, such as lands within the National Park System, near Wild and Scenic Rivers or the National System of Trails, and within 300 feet of occupied homes, churches, public buildings, and parks. All states can deny, and in fact, are obligated to deny any permit application that the respective state determines will result in material damage (acid damage).

Citizen Involvement Under SMCRA

Under the provisions of SMCRA, citizens have the right to accompany a mine inspector if a problem (violation or imminent harm situation is thought to exist) is alleged in writing and a request is made to participate in the inspection. Citizen groups in coal states have exercised their rights under the statute to ensure that mine operations, inspections, and reclamation work proceed in accordance with the best available practices to protect public health and the environment. Agency records on mine activity are available for citizen inspection under the federal Freedom of Information Act and corresponding state laws.

Preventing CMD formation at currently operating mines involves careful attention to mandated plans for managing the handling and/or disposal of overburden and other wastes. While ninety-five percent of

all mine spoil does not contribute to water quality problems, federal permit regulations require operators to identify any acidic and other toxic-forming rock layers between the ground surface and the stratum just below the coal bed. Operators must engineer their mining plans to ensure that these problem materials are disposed of in a manner that prevents the formation of CMD. This can be accomplished through careful mixing of acid and alkaline materials; isolation of problem material through capping, burial, or runoff diversion; or application of chemical additives like lime to neutralize harmful by-products. Alkaline products such as flyash, kiln dust, alkaline recharge structures, etc., are also used. Groundwater diversions such as the use of highwall drains, and pit floor drains, are also used to control water movement through the site.

Additional Information on SMCRA

Additional information on SMCRA and related regulations is available from OSM, EPA, state mining agencies, and nongovernmental groups like the Citizens Coal Council and the National Mine Land Reclamation Center.

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