



COALEX STATE INQUIRY REPORT - 111
October 23, 1989

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TOPICS:

- I. TERMINATION OF JURISDICTION
- II. WETLAND TREATMENT OF ACID MINE DRAINAGE
- III. ACID MINE DRAINAGE OFF THE PERMIT AREA

INQUIRIES:

- I. When does the state's authority over a surface mining operation end? After release of the reclamation bond?
- II. What information is available on the use of wetland filters as a means of treating acid mine drainage?
- III. Are there any Interior Office of Hearings and Appeals (OHA) decisions on acid mine water draining beyond the permit boundary?

SEARCH RESULTS: Research was conducted using the COALEX Library, as well as other legal, administrative and published materials in LEXIS. Items identified during the research are discussed below. Copies are attached.

I TERMINATION OF JURISDICTION: 30 CFR Sec. 700.11(d).

On November 2, 1988, OSM issued a final rule clarifying "the circumstances whereby a regulatory authority may terminate regulatory jurisdiction under a regulatory program" approved under SMCRA (53 FR 44356). As described in the preamble:

"This final rule requires the regulatory authority either to make a written determination that the permittee has met all reclamation requirements, or to decide to release fully a permanent program performance bond before regulatory jurisdiction over the reclaimed site of a completed surface coal mining and reclamation operation, or increment thereof, or of a coal exploration can be terminated."

"The regulatory authority is vested with the authority to determine that reclamation has been completed."



"An operator's obligations...and regulatory authority jurisdiction...simultaneously terminate at the time of proper final bond release...because the period of extended responsibility will have run, all reclamation obligations will have been met successfully and, by definition in the statute, as surface mining and reclamation operation no longer exists. Liability...for a failure of reclamation, however, may be subject of a Secretarial or regulatory authority inquiry or a civil suit...[A] regulatory authority will be required to reassert jurisdiction if it can be shown that the bond release was based upon fraud, collusion, or any other misrepresentation of a material fact at the time of bond release."

II WETLANDS TREATMENT OF ACID MINE DRAINAGE.

DIRECTIVE: "Use of Wetland Treatment Systems for Coal Mine Drainage", Transmittal No. 468, Subject No. TSR-10 (September 8, 1988).

This directive established guidelines for the use of wetlands.

1. Wetland treatment system is defined as: "A passive biological effluent treatment system consisting of a shallow depression or impoundment or series of such depressions or impoundments designed and constructed to support hydrophilic vegetation for the purpose of removing dissolved metals [and] otherwise improving discharge quality."
2. These "dynamic organic systems" can be a "low-cost means of treating acid mine drainage"; however, their effectiveness is "highly dependent on maintenance of controlled inflow volumes and velocities, circulation patterns and water depth...In addition, the capacity of any wetland for removal of dissolved metals may be finite."
3. A wetlands treatment system "must be supported by an operable chemical or other conventional treatment system" which can be activated in the event that the wetlands system cannot "adequately treat the discharge".

45 FR 49872 (JULY 25, 1980) and EXECUTIVE ORDER NO. 11990, 42 FR 26961 (MAY 25, 1977).

Both of these documents focus on the protection of existing wetlands.

ARTICLES FROM COAL AND RELATED PUBLICATIONS

Chironis, "Mine-Built Ponds Economically Clear Acid Mine Waters", Coal Age, Jan., 1987, at 58.

"New studies show that properly designed and constructed wetlands outfitted with cattails and other marsh plants can efficiently and inexpensively treat discharges of acid mine water."

"Nature Treats Tainted Runoff", Engineering News-Record, Sept. 17, 1987, at 26.

"[T]he Tennessee Valley Authority is creating larger projects to microbiologically treat seepage from ash generated by its coal-fired powerplants."



"Moss Tested to Remove Manganese from Mine Drainage", Coal Age, Sept., 1984, at 28.

John Burris, a researcher at Pennsylvania State University, is experimenting with the use of sphagnum moss in settling ponds to remove manganese and iron from mine water discharges.

Chironis, "R & D Aims at Safer, Faster Mining", Coal Age, Feb., 1984, at 60.

"The Bureau of Mines' [research and development] programs will pay off well in 1984 with practical innovations. But the bureau is being restricted to more basic research."

"Build Your Own Bog to Neutralize Acid Mine Drainage", Coal Age, June, 1983, at 77.

Gerald Lang and R. Kelman Wieder, researchers at West Virginia University, are seeking "an expensive way to neutralize acid-laced water from coal mines."

"Use of Wetlands May Solve Acid Mine Drainage Problem", Coal Week, Nov. 22, 1982, at 3.

Gerald Lang was awarded a grant to "examine the use of natural and artificial freshwater wetlands in controlling acid mine drainage."

"Stopping Acid Mine Drainage", Chemical Engineering, Nov. 1., 1982, at 35.

"Bacteria and chemicals are featured in new methods for checking water pollution caused by drainage from coal mines in Pennsylvania, Ohio and West Virginia."

III ACID MINE DRAINAGE OFF THE PERMIT AREA

BLACK FOX MINING & DEVELOPMENT CORP., 2 IBSMA 110, IBSMA 80-28 (June 6, 1980) and

BLACK FOX MINING & DEVELOPMENT CORP. v OSM, Docket No. CH 9-172-R (Jan. 28, 1980).

The Interior Board of Surface Mining and Reclamation Appeals affirmed the Administrative Law Judge's finding that OSM had shown that "surface drainage left the permit area."

[NOTE: Additional information on "mining off the permit area" may be found in State Inquiry Reports 105 ("Bond forfeiture - relationship of bond to permitted area") and 102 ("Forfeiture of reclamation bonds; liability period").]

ATTACHMENTS

- A. 53 FR 44356 (NOVEMBER 2, 1988).
- B. DIRECTIVE, "Use of Wetland Treatment Systems for Coal Mine Drainage", Transmittal No. 468, Subject No. TSR-10 (September 8, 1988).



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT
U.S. Department of the Interior

- C. 45 FR 49872 (JULY 25, 1980).
- D. EXECUTIVE ORDER NO. 11990, 42 FR 26961 (MAY 25, 1977).
- E. Chironis, "Mine-Built Ponds Economically Clear Acid Mine Waters", Coal Age, Jan., 1987, at 58.
- F. "Nature Treats Tainted Runoff", Engineering News-Record, Sept. 17, 1987, at 26.
- G. "Moss Tested to Remove Manganese from Mine Drainage", Coal Age, Sept., 1984, at 28.
- H. Chironis, "R & D Aims at Safer, Faster Mining", Coal Age, Feb., 1984, at 60.
- I. "Build Your Own Bog to Neutralize Acid Mine Drainage", Coal Age, June, 1983, at 77.
- J. "Use of Wetlands May Solve Acid Mine Drainage Problem", Coal Week, Nov. 22, 1982, at 3.
- K. "Stopping Acid Mine Drainage", Chemical Engineering, Nov. 1., 1982, at 35.
- L. BLACK FOX MINING & DEVELOPMENT CORP., 2 IBSMA 110, IBSMA 80-28 (June 6, 1980).
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