



## COALEX STATE INQUIRY REPORT - 276

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**TOPIC:** DEFINITION OF: "CURRENT, PRUDENT ENGINEERING PRACTICES"

**INQUIRY:** According to the performance standards for roads found in 30 CFR Sec. 817.150(b)(1), controlling or preventing erosion, siltation, etc. or otherwise stabilizing exposed surfaces must be accomplished "in accordance with current, prudent engineering practices". Are there any materials that define "prudent engineering practices"?

**SEARCH RESULTS:** Research was conducted using the COALEX Library and other materials available on LEXIS. According to preambles to federal regulations published in the Federal Register, the phrase in question was used by OSM beginning in 1983 in order to make OSM rules consistent with Mine Safety and Health Administration (MSHA) rules. As explained in the preambles, OSM chose to require performance standards for roads combined with design of the roads by a registered professional engineer following "current, prudent engineering practices" rather than provide detailed design and construction criteria. Such rules would provide flexibility to design roads to meet site specific requirements.

Excerpts from two Federal Register notices provide the only identified specific definitions of the phrase in question. Further explanation is provided by the history of "road" regulation. Excerpts from Interior administrative decisions that mention some form of "sound or prudent engineering practices" are enclosed for background. Copies of the materials discussed below are attached unless otherwise noted.

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### MOST RECENT FEDERAL REGISTER NOTICES

**48 FR 32910 (JULY 19, 1983). Final rule. Excess spoil fills.**



"One commenter asserted that the phrase 'accepted engineering practices' is more appropriate than 'standard geotechnical engineering method' as used in the proposed provision since there are no standard methods of practice established. OSM agrees that the suggested phrase is more consistent with actual practice. But in order to make the rules more consistent with MSHA rules, OSM has chosen to use MSHA phrasing -- 'current, prudent engineering practices.' This phrase, taken from 30 CFR 77.215(i), is interpreted to mean practices well-established by engineering principles and widely recognized by experts for use in excess spoil disposal, as opposed to practices being novel or experimental. The engineer is also responsible for confirming that the practice has long-term reliability. Final Sec. 816.71(f)(3) is revised accordingly."

#### **48 FR 22110 (MAY 16, 1983). Final rules. Roads.**

Section 816.151(a). "The phrase 'current, prudent engineering practices' has been adopted to make the rules consistent with the rules of the Mine Safety and Health Administration in 30 CFR 77.215. It includes practices well-established by engineering principles and widely recognized by experts with experience in the subject."

Similar language appears in the 53 FR 45190 (NOVEMBER 8, 1988) notice; see below.

### **REGULATORY HISTORY**

The Regulatory History is taken from 53 FR 45190 (November 8, 1988) Final rules with additional information added from individual Federal Register notices.

#### **43 FR 41662 (SEPTEMBER 18, 1978). Proposed permanent rules. Sections 816.31-816.39/817.31-817.39. Roads and other transportation facilities.**

The proposed rules included design, construction, maintenance and reclamation criteria in order to control or substantially reduce adverse impacts of coal mine access and haul roads associated with surface mining.

#### **44 FR 14902 (MARCH 13, 1979). Permanent program - final rules.**

Section 701.5 defined roads for surface mining operations and established a three-tiered road classification system.

Sections 816.150-816.176/817.150-817.176. Roads. These rules contained "expansive and detailed provisions pertaining to road construction, maintenance and postmining conditions" and provided specific provisions for each of the classifications. Evaluating rules, guidelines and specifications from numerous sources, OSM developed the three-tiered classification system by "synthesizing concepts, practices and techniques for the design and construction, reconstruction, utilization, maintenance and restoration of roads."



**IN RE: PERMANENT SURFACE MINING REGULATION LITIGATION, No. 79-1144,  
19 ERC (BNA) 1477 (D DC May 16, 1980).**

The court remanded the rules for further consideration because the Secretary had not given adequate notice that he was considering a classification system.

[NOTE: Case not included with Report.]

**45 FR 51547 (AUGUST 4, 1980).**

OSM suspended the permanent program rules for roads.

[NOTE: Federal Register notice not included with Report.]

**47 FR 56 (JANUARY 4, 1982) & 47 FR 16592 (April 16, 1982).**

Rules substantially different from the remanded and suspended 1979 rules were proposed.

Option 1 "would establish performance standards for primary roads coupled with minimum design criteria known to assure proper performance through testing and past practice."

Option 2 would establish "performance standards for primary roads coupled with a requirement of certification by a qualified registered professional engineer that acceptable engineering criteria have been incorporated in the design and construction in order to ensure compliance."

"Even if Option 2 is selected, OSM would continue to encourage adherence to tested and recognized design criteria.... A decision not to use design criteria in the rules for primary roads should not be construed as reflecting on the validity of these standards. These criteria have been developed and tested by long-standing experience, study and observation, and should be considered valid and prudent for use in ensuring environmental performance in most situations."

[NOTE: 47 FR 56 (JANUARY 4, 1982) is not included with this Report.]

**48 FR 22110 (MAY 16, 1983).**

The final rules constituted an extensive expansion of the statutory performance standards and gave regulatory authorities greater flexibility as to the details of road design than did the remanded and suspended 1979 rules. Upon issuance these rules were challenged.



II. Discussion of the rules adopted. Section 816.151(a). "The phrase 'current, prudent engineering practices' has been adopted to make the rules consistent with the rules of the Mine Safety and Health Administration in 30 CFR 77.215. It includes practices well-established by engineering principles and widely recognized by experts with experience in the subject."

**IN RE: PERMANENT SURFACE MINING REGULATION LITIGATION II, No. 79-1144, slip op. (D DC October 1, 1984).**

The court remanded 816.150(a) holding that OSM, in promulgating the classification system, violated the Administrative Procedure Act by again not providing adequate notice and opportunity to comment. In an amended order filed December 10, 1984, the court remanded all of the rules governing roads which were dependent upon the road classification system.

[NOTE: Case not included with Report.]

**50 FR 7278 (FEBRUARY 21, 1985).**

OSM suspended the rules as well as the definition of road to give OSM an opportunity to reconsider all the provisions in the rules affecting the performance standards for roads.

[NOTE: Federal Register notice not included with Report.]

**52 FR 42258 (NOVEMBER 3, 1987).**

OSM proposed rules that were similar to the 1983 remanded and suspended rules.

**53 FR 45190 (NOVEMBER 8, 1988)**

"These final rules are a reasonable interpretation of sections 515(b)(17) and (18) of the Act."

Sections 780.37(b)/784.24(b). Primary road certification. "This provision is identical to the proposed rule and requires that the plans and drawings for each primary road be prepared by or under the direction of a qualified registered professional engineer experienced in the design and construction of roads. It also requires that the engineer certify that the design meets the performance standards of 30 CFR Chapter VII, current prudent engineering practices, and any design criteria established by the regulatory authority. The phrase 'current, prudent engineering practices' includes those practices well-established by engineering principles and widely recognized by experts with experience in the subject."



Sections 816.150(b)/817.150(b). Performance Standards. "Now after ten years of experience, most of that in oversight of approved State programs, which deal with roads quite effectively, but through quite varied approaches, OSMRE feels that the expansion of the statutory language being promulgated today is fully adequate to ensure that statutory standards are met."

## ATTACHMENTS

- A. 48 FR 32910 (JULY 19, 1983). Final rule. Excess spoil fills. [Excerpts]
- B. 43 FR 41662 (SEPTEMBER 18, 1978). Proposed permanent rules. Sections 816.31-816.39/817.31-817.39. Roads and other transportation facilities.
- C. 44 FR 14902 (MARCH 13, 1979). Permanent program - final rules. Sections 816.150-816.176/817.150-817.176. Roads.
- D. 47 FR 16592 (APRIL 16, 1982). Proposed rules. Roads.
- E. 48 FR 22110 (MAY 16, 1983). Final rule. Roads
- F. 52 FR 42258 (NOVEMBER 3, 1987). Proposed rule. Roads.
- G. 53 FR 45190 (NOVEMBER 8, 1988). Final rule. Roads.
- H. NATIONAL WILDLIFE FEDERATION v LUJAN, 31 ERC (BNA) 2034, 21 ELR 20125 (D DC August 30, 1990). [Excerpts]
- I. NATIONAL WILDLIFE FEDERATION v HODEL, 839 F 2d 694 (DC Cir January 29, 1988). [Excerpts]
- J. THE PITTSBURGH AND MIDWAY COAL MINING CO. v OSM, Docket Nos. TU 4-8-P, TU 4-9-P, TU 4 14-R, TU 4-34-R, TU 5-35-R (1985).
- K. Interior Administrative Decision Excerpts from:
  - A. Rhonda Lou Energy Corp. #2 v OSM, Docket Nos. CH 9-34-R, CH 9-23 R (1979).
  - B. PAULA COAL CO., INC. v OSM, Docket No. NX 0-62-P (1980).
  - C. STRUNK BROTHERS COAL CO. v OSM, Docket No. NX 3-10-R (1985).
  - D. CLINCHFIELD COAL CO. v OSM, Docket Nos. NX 5-39-R, NX 5-40-P (1987).
  - E. Harlan Cumberland Coal Co. v OSM, Docket No. NX 7-86-R (1988).
  - F. COLLINS MINING CO. v OSM, 103 IBLA 25, IBLA 87-327 (1988).
  - G. THE PITTSBURGH & MIDWAY COAL MINING CO. v OSM, Docket No. TU 88-4-R (1988).