TOPIC: DEFINITION OF "MINE STABILITY"

INQUIRY: What does the phrase "mine stability" mean under subsidence control regulations [30 CFR Sec. 817.121(a) or SMCRA Sec. 516(b)(1), 30 U.S.C. Sec. 1266] or under other federal statutes?

SEARCH RESULTS: Using the COALEX Library and other materials available on LEXIS, research was conducted in the legislative history of SMCRA, Interior administrative decisions, federal and state caselaw, all titles of the United States Code and Federal Register preambles to proposed and final rules.

The phrase "maximize mine stability" is used when addressing subsidence issues and regulations. Mine stability is referred to as necessary to prevent or reduce "material damage" to surface lands, structures, etc. caused by subsidence; however, no materials were identified which specifically define the phrase in question. Occurrences of "mine stability" are discussed below. Copies of these materials are attached.

U.S. CODE AND CODE OF FEDERAL REGULATIONS

The phrase appears once in the U.S. Code (U.S. Code Service): 30 USCS Sec. 1266(b)(1) [SMCRA Sec. 516(b)(1)]. Surface effects of underground coal mining.


   The language mirrors that of the Act.


   This section uses some of the same language as the OSM regulation and then adds that
operators "shall adopt measures...consistent with" the corresponding OSM rules: 30 CFR 784.20, 817.121, 817.122, 817.124 and 817.126.

LEGISLATIVE HISTORY


In presenting his view of the "negative impact of federal legislation", Mr. Samples states in the section "Bill Overlays Underground Mining":

"Underground operations, mine stability, subsidence, and disposal of mine refuse involve extremely complex geological and engineering considerations. Further, they cannot be divorced from the paramount concern for mine safety. These matters...are exhaustively covered by the Federal Coal Mine Health and Safety Act of 1969."


Representative Hechler quoted from an unpublished Bureau of Mines study entitled "Environmental Effects of Underground Mining and of Mineral Processing":

"[P]reventative action can be taken to stabilize abandoned mines where subsidence has not yet occurred. Prevention, of course, can be most effective in active mines if permanent support of the overburden is incorporated in the mining process."


One of the "adverse environmental effects" of mining is "uncontrolled subsidence". Mr. Dole states that the Bureau of Mining has used "backfilling of mine voids" as a technique for "stabilizing abandoned mine workings beneath populated areas."

FEDERAL REGISTER ENTRIES


a. 30 CFR 784.20 Subsidence control plan.
   The requirement to provide data on "artificial supports and the bearing strength of coal pillars" which was in the proposed rules was deleted from the final rules. Backfilling is retained as an "alternate method", not a required method, "of reducing the likelihood of subsidence damage". (44 FR 15075).
b. 30 CFR 817.121-817.126 Subsidence control.
   After stating that proper subsidence control measures are needed "in order to 'maximize
   mine stability'"", the preamble to these sections continues with a technological discussion
   couched in terms of subsidence and provides a list of technical literature used in writing
   the rules:

   "Determination of on- and off-site subsidence potential requires consideration of coal thickness
   mined, mining geometry and dimensions, and the nature of overlying and underlying strata."

   "Another measure which can significantly reduce subsidence is placement of fill, whether
   hydraulically or pneumatically, behind a longwall face....Backfilling through surface bore holes
   has also been used by the Bureau of Mines in an attempt to limit subsidence over abandoned
   room and pillar mines." (44 FR 15272)

   OSM proposed these rules to "revise the subsidence control plan rule and the rules requiring
   protection from underground mining operations causing subsidence. This rulemaking is needed
   in order to eliminate unnecessary detail".


a. 784.20 Subsidence control plan.
   The final rule regulates planned subsidence "from longwall mining or any other full-
   extraction method", as well as "operations that plan to prevent or minimize subsidence."
   The subsidence control plan is "properly directed only to the evaluation of the surface
   impacts of underground mines."

   The final rule did not incorporate the proposed rule's requirement for both a general and a
   detailed subsidence control plan. In discussing the two-tiered requirement of the proposed
   rule, one commenter made reference to "maximum mine stability": "[O]nly the general
   plan should be required where maximum mine stability is to be provided, whereas a
detailed plan should be required for areas where planned subsidence is used."

b. 817.121 and 817.122 Subsidence control requirements.
   "The final rule establishes a distinction between damage to land and damage to structures
   or facilities....[A]ll subsidence-caused material damage to the land is required to be
   repaired. Operator responsibility for material damage caused to structures of facilities is
   tied to liability under State law."

   817.121(a). No comments were received nor explanations provided in this preamble for
   the phrase "maximum mine stability", which appears in this subsection.

   817.121(g). This subsection requires the "submission of a detailed plan of the
   underground workings under a schedule approved by the regulatory authority....[T]he
   subsidence control plan, submitted with the permit application, provides information on
the underground areas where specific types of control technologies will be used, but does not require extensive information on the details of the underground workings. Submittal of such information can properly be delayed until the details of the mining operation are known more precisely."

This rule corrects "typographical errors, misspellings, and obsolete part and section references."

50 FR 7274 (FEBRUARY 21, 1985). Notice of Suspension.
As a result of the District Court decision in Round II of the SMCRA litigation, the rule requiring "operators to redress material damage to structures caused by subsidence only to the extent required by State law" was suspended. "The Court held that it was improper for OSM to adopt without sufficient notice a final rule that represented a complete reversal of policy from the 1979 regulation."

"[O]perator responsibility for material damage to structures or facilities resulting from subsidence will derive from applicable provisions of State law."

ATTACHMENTS

A. 30 USCS Sec. 1266(b)(1) [SMCRA Sec. 516(b)(1)]. Surface effects of underground coal mining.
   1. 30 CFR Part 784
   2. 30 CFR Part 817