

*Title 38*  
*Interpretive Rule*

WEST VIRGINIA INTERPRETATIVE RULE  
DEPARTMENT OF NATURAL RESOURCES *EH 017*  
CHAPTER ~~20-6~~  
Series ~~vii~~ *2C*

UNDERGROUND MINING SUBSIDENCE CONTROL PLAN

Section 1. General

- 1.1 Scope - This interpretative rule establishes the requirements for underground mining subsidence control plans.
- 1.2 Authority - W. Va. Code 20-6
- 1.3 Filing Date - April 19, 1985
- 1.4 Effective Date - *May 19* ~~April 19~~, 1985

Section 2. ALL UNDERGROUND MINES

- 2.1 Survey - topographic map of a scale 1" = 1000' or less; the survey shall cover all areas overlying the projected mine areas within the angle of critical deformation but at least 15° from any coal removal.
  - 2.1A.* All renewable resource lands which include but may not be limited to: agricultural or pasture lands, intensively managed commercial forests, and public use lands.
  - 2.1B.* All structures clearly identified for use (including all protected structures as set out in 7C.02(d) of ~~the Regula-~~ *Series 2*) ~~tions~~ Structures shall include but not be limited to public roads, high tension power lines, gas collection and transmission lines, gas and oil wells, public or commercial water system distribution lines, dwellings, utility buildings, public buildings, industrial or commercial buildings, impoundments, coal refuse piles, and other structures typically shown on USGS Topographic Maps.
  - 2.1C.* Intermittent and perennial streams.
  - 2.1D.* Public and private water supplies (wells, springs, etc.)
- 2.2 A description of all significant aquifers. This information can be included by reference in the PHC portion of the application.

- 2.3 The director may waive the remainder of the requirements for a subsidence plan if the survey indicates and the director determines that no material damage or diminution of value or foreseeable use of the land could be caused by subsidence.

A general description of the technique of coal removal (i.e., room and pillar with pillar removal, longwall, hydraulic mining, etc.)

Section 3. LONGWALL MINING OR ROOM AND PILLAR WITH 80% RECOVERY OR GREATER

- 3.1 All areas where planned subsidence is projected based on angle of critical deformation (may be shown on survey map, mine development map or other map on which the information from the survey is easily discernable). If it is proposed that the angle of critical deformation is less than 15°, supporting data must be included.
- 3.2 Typical predicted subsidence profile(s) for areas of planned subsidence. Specify from what source information was obtained to develop the predicted profile(s) including an explanation of the method and calculations used to develop prediction.
- 3.3 For all areas identified by the survey indicate what measures will be taken to prevent material damage or reduction in value or reasonably foreseeable use. Indicate those areas in which measures are to be taken (for structures this need not be addressed when the applicant demonstrates the right to subside without liability). Such measures may include, but not be limited to, relocating panels, mining without interruption, exposing gas lines and supporting foundations of structures.
- 3.4 Specify anticipated effects of planned subsidence.

Section 4. ALL UNDERGROUND MINES

- 4.1 Strike and dip of coal in accordance with 7C.03(a)4, of Series 2.
- 4.2 A map showing surface contours and bottom of coal contours (this can be done on the survey map or proposal map or separately) or an overburden isopach map in accordance with 7C.03(a)4, of Series 2
- 4.3 Average seam thickness.
- 4.4 Overburden lithology which adequately represents the projected underground mining area and how the lithology was obtained.
- 4.5 Hydrologic conditions which may affect subsidence.
- 4.6 Other geologic conditions which may affect subsidence.

Section 5. ROOM AND PILLAR MINING WITH LESS THAN 80% EXTRACTION

- 5.1 On the development map, show all first mining and areas of planned pillar extraction in accordance with 7A.01, of Series 2
- 5.2 Describe anticipated secondary mining plans including percent extraction in accordance with 7C.03(a)5, 7C.02(a) and (d), of Series 2
- 5.3 Under all structures and renewable resource lands, demonstrate what methods will be used to protect that structure or lands (i.e., leaving solid coal or limited extraction). Under structures and perennial streams, the area addressed must extend to the angle of critical deformation. Any purported angle of critical deformation less than 15° must be supported by data. If mining is planned under or adjacent to a structure or perennial stream (for structures this need not be addressed when the applicant demonstrates the right to subside without liability), it must be demonstrated to the extent technologically and economically feasible that the pillar design will support the overburden in accordance with 7C.03(a)5, 7C.02(a) and (d). If it is not technologically and economically feasible, a detailed explanation must be included.

Section 6. ALL UNDERGROUND MINES

- 6.1 A description of the measures to be taken in order to repair subsidence damage to structures, should any occur, as specified in Sections 7C.02(b)(1)-(3) *of Series 2*
- 6.2 Any other measures taken to mitigate or remedy any material damage or diminution in value or foreseeable use that may occur
- 6.4 An acknowledgement that if subsidence causes material damage or reduces the value or reasonably foreseeable use of the surface lands, then the operator shall restore the land to a condition capable of supporting uses it was capable of supporting before subsidence regardless of the right to subside.
- 6.5 When an applicant feels it has the right to subside, a copy of relevant portions of the actual document providing the right to subside must be included. When the applicant has the right to subside, subparagraphs 1 and 2 of this section need not be addressed.

Section 7. ALL UNDERGROUND MINES

List all owners of property and residents within the area above the proposed underground workings. This list could be included on the survey or mine development map if sufficiently legible. The area above the underground works shall mean within the angle of critical deformation but at least 15° from any coal removal.

Section 8. ADDITIONAL REQUIREMENTS *Series 2*

Proposals to mine under or adjacent to features or facilities indicated in Section 7C.02(d) (i.e., churches, schools, public buildings, etc.) must be made in writing.

In addition to the information required above, other information may be required on a site specific basis.