of permanent supports, a row of temporary supports on no more than 5-foot centers or equivalent support shall be installed across the opening within 4 feet of the supports being removed. Additional supports shall be installed where necessary to assure safe removal.

- (2) Prior to the removal of roof bolts, temporary support shall be installed as close as practicable to each roof bolt being removed.
- (d) Temporary supports installed in accordance with this section shall not be removed unless—
- (1) Removal is done by persons who are in a remote location under supported roof; and
- (2) At least two rows of temporary supports, set across the opening on no more than 5-foot centers, are maintained between the miners and the unsupported area.
- (e) Each entrance to an area where supports have been removed shall be posted with a readily visible warning or a physical barrier shall be installed to impede travel into the area.
- (f) Except as provided in paragraph (g) of this section, permanent support shall not be removed where—
- (1) Roof bolt torque or tension measurements or the condition of conventional support indicate excessive loading:
 - (2) Roof fractures are present;
- (3) There is any other indication that the roof is structurally weak; or
- (4) Pillar recovery has been conducted.
- (g) Permanent supports may be removed provided that:
- (1) Removal is done by persons who are in a remote location under supported roof; and
- (2) At least two rows of temporary supports, set across the opening on no more than 5-foot centers, are maintained between the miners and the unsupported area.
- (h) The provisions of this section do not apply to removal of conventional supports for starting crosscuts and pillar splits or lifts except that prior to the removal of these supports an examination of the roof conditions shall be made.

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§ 75.214 Supplemental support materials, equipment and tools.

- (a) A supply of supplementary roof support materials and the tools and equipment necessary to install the materials shall be available at a readily accessible location on each working section or within four crosscuts of each working section.
- (b) The quantity of support materials and tools and equipment maintained available in accordance with this section shall be sufficient to support the roof if adverse roof conditions are encountered, or in the event of an accident involving a fall.

§75.215 Longwall mining systems.

For each longwall mining section, the roof control plan shall specify—

- (a) The methods that will be used to maintain a safe travelway out of the section through the tailgate side of the longwall; and
- (b) The procedures that will be followed if a ground failure prevents travel out of the section through the tailgate side of the longwall.

§75.220 Roof control plan.

- (a)(1) Each mine operator shall develop and follow a roof control plan, approved by the District Manager, that is suitable to the prevailing geological conditions, and the mining system to be used at the mine. Additional measures shall be taken to protect persons if unusual hazards are encountered.
- (2) The proposed roof control plan and any revisions to the plan shall be submitted, in writing, to the District Manager. When revisions to a roof control plan are proposed, only the revised pages need to be submitted unless otherwise specified by the District Manager.
- (b)(1) The mine operator will be notified in writing of the approval or denial of approval of a proposed roof control plan or proposed revision.
- (2) When approval of a proposed plan or revision is denied, the deficiencies of the plan or revision and recommended changes will be specified and the mine operator will be afforded an opportunity to discuss the deficiencies and changes with the District Manager.
- (3) Before new support materials, devices or systems other than roof bolts