§ 75.334 Worked-out areas and areas where pillars are being recovered.

(a) Worked-out areas where no pillars have been recovered shall be—

(1) Ventilated so that methane-air mixtures and other gases, dusts, and fumes from throughout the worked-out areas are continuously diluted and routed into a return air course or to the surface of the mine; or

(2) Sealed.

(b)(1) During pillar recovery a bleeder system shall be used to control the air passing through the area and to continuously dilute and move methane-air mixtures and other gases, dusts, and fumes from the worked-out area away from active workings and into a return air course or to the surface of the mine.

(2) After pillar recovery a bleeder system shall be maintained to provide ventilation to the worked-out area, or the area shall be sealed.

(c) The approved ventilation plan shall specify the following:

(1) The design and use of bleeder systems;

(2) The means to determine the effectiveness of bleeder systems;

(3) The means to determine the effectiveness of bleeder systems;
§ 75.335 Seal strengths, design applications, and installation.

(a) Seal strengths. Seals constructed on or after October 20, 2008 shall be designed, constructed, and maintained to withstand—

1(i) At least 50 psi overpressure when the atmosphere in the sealed area is monitored and maintained inert and designed using a pressure-time curve with an instantaneous overpressure of at least 50 psi. A minimum overpressure of at least 50 psi shall be maintained for at least four seconds then released instantaneously.

(ii) Overpressures of at least 120 psi if the atmosphere in the sealed area is not monitored, is not maintained inert, the conditions in paragraphs (a)(3)(i) through (iii) of this section are not present, and the seal is designed using a pressure-time curve with an instantaneous overpressure of at least 120 psi. A minimum overpressure of 120 psi shall be maintained for at least four seconds then released instantaneously.

(iii) Overpressures greater than 120 psi if the atmosphere in the sealed area is not monitored and is not maintained inert, and

1(i) The atmosphere in the sealed area is likely to contain homogeneous mixtures of methane between 4.5 percent and 17.0 percent and oxygen exceeding 17.0 percent throughout the entire area;

1(ii) Pressure piling could result in overpressures greater than 120 psi in the area to be sealed; or

1(iii) Other conditions are encountered, such as the likelihood of a detonation in the area to be sealed.

(iv) Where the conditions in paragraphs (a)(3)(i), (ii), or (iii) of this section are encountered, the mine operator shall revise the ventilation plan to address the potential hazards. The plan shall include seal strengths sufficient to address such conditions.

(b) Seal design applications. Seal design applications from seal manufacturers or mine operators shall be in accordance with paragraphs (b)(1) or