

**§ 816.13 Casing and sealing of drilled holes: General requirements.**

Each exploration hole, other drill or borehole, well, or other exposed underground opening shall be cased, sealed, or otherwise managed, as approved by the regulatory authority, to prevent acid or other toxic drainage from entering ground or surface waters, to minimize disturbance to the prevailing hydrologic balance, and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit area and adjacent area. If these openings are uncovered or exposed by surface mining activities within the permit area they shall be permanently closed, unless approved for water monitoring, or otherwise managed in a manner approved by the regulatory authority. Use of a drilled hole or borehole or monitoring well as a water well must meet the provisions of § 816.41 of this part. This section does not apply to holes solely drilled and used for blasting.

[44 FR 15395, Mar. 13, 1979, as amended at 48 FR 14822, Apr. 5, 1983; 48 FR 43990, Sept. 26, 1983]

**§ 816.14 Casing and sealing of drilled holes: Temporary.**

Each exploration hole, other drill or boreholes, wells and other exposed underground openings which have been identified in the approved permit application for use to return coal processing waste or water to underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed before use and protected during use by barricades, or fences, or other protective devices approved by the regulatory authority. These devices shall be periodically inspected and maintained in good operating condition by the person who conducts the surface mining activities.

[44 FR 15395, Mar. 13, 1979; 44 FR 49686, Aug. 24, 1979]

**§ 816.15 Casing and sealing of drilled holes: Permanent.**

When no longer needed for monitoring or other use approved by the regulatory authority upon a finding of no adverse environmental or health and safety effect, or unless approved

for transfer as a water well under § 816.41, each exploration hole, other drilled hole or borehole, well, and other exposed underground opening shall be capped, sealed, backfilled, or otherwise properly managed, as required by the regulatory authority, under § 816.13 and consistent with 30 CFR 75.1711. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, and machinery, and to keep acid or other toxic drainage from entering ground or surface waters.

[44 FR 15395, Mar. 13, 1979, as amended at 48 FR 43990, Sept. 26, 1983]

**§ 816.22 Topsoil and subsoil.**

(a) *Removal.* (1)(i) All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated.

(ii) Where the topsoil is of insufficient quantity or poor quality for sustaining vegetation, the materials approved by the regulatory authority in accordance with paragraph (b) of this section shall be removed as a separate layer from the area to be disturbed, and segregated.

(2) If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

(3) The regulatory authority may choose not to require the removal of topsoil for minor disturbances which—

(i) Occur at the site of small structures, such as power poles, signs, or fence lines; or

(ii) Will not destroy the existing vegetation and will not cause erosion.

(4) *Timing.* All material to be removed under this section shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

(b) *Substitutes and supplements.* Selected overburden materials may be substituted for, or used as a supplement to topsoil if the operator demonstrates to the regulatory authority that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the