of monoculture and to diversify habitat types for birds and other animals.

(i) Where residential, public service, or industrial uses are to be the postmining land use, and where consistent with the approved postmining land use, the operator shall intersperse reclaimed lands with greenbelts utilizing species of grass, shrubs, and trees useful as food and cover for wildlife.

§ 817.99 Slides and other damage.

At any time a slide occurs which may have a potential adverse effect on public, property, health, safety, or the environment, the person who conducts the underground mining activities shall notify the regulatory authority by the fastest available means and comply with any remedial measures required by the regulatory authority.

§ 817.100 Contemporaneous reclamation.

Reclamation efforts, including but not limited to backfilling, grading, topsoil replacement, and revegetation, on all areas affected by surface impacts incident to an underground coal mine shall occur as contemporaneously as practicable with mining operations, except when such mining operations are conducted in accordance with a variance for concurrent surface and underground mining activities issued under §785.18 of this chapter. The regulatory authority may establish schedules that define contemporaneous reclamation.

§ 817.102 Backfilling and grading: General requirements.

(a) Disturbed areas shall be backfilled and graded to—

(1) Achieve the approximate original contour, except as provided in paragraph (k) of this section;

(2) Eliminate all highwalls, spoil piles, and depressions, except as provided in paragraph (h) (small depressions) and in paragraph (k) (previously mined highwalls) of this section;

(3) Achieve a postmining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and to prevent slides;

(4) Minimize erosion and water pollution both on and off the site; and

(5) Support the approved postmining land use.

(b) Spoil, except as provided in paragraph (l) of this section, and except excess spoil disposed of in accordance with §§817.71 through 817.74, shall be returned to the mined-out surface area.

(c) Spoil and waste materials shall be compacted where advisable to ensure stability or to prevent leaching of toxic materials.

(d) Spoil may be placed on the area outside the mined-out surface area in nonsteep slope areas to restore the approximate original contour by blending the spoil into the surrounding terrain if the following requirements are met:

(1) All vegetative and organic material shall be removed from the area.

(2) The topsoil on the area shall be removed, segregated, stored, and redistributed in accordance with §817.22.

(3) The spoil shall be backfilled and graded on the area in accordance with the requirements of this section.

(e) Disposal of coal processing waste and underground development waste in the mined-out surface area shall be in accordance with §§817.81 and 817.83, except that a long-term static safety factor of 1.3 shall be achieved.

(f) Exposed coal seams, acid- and toxic-forming materials, and combustible materials exposed, used, or produced during mining shall be adequately covered with nontoxic and noncombustible materials, or treated, to control the impact on surface and ground water in accordance with §817.41, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(g) Cut-and-fill terraces may be allowed by the regulatory authority where—

(1) Needed to conserve soil moisture, ensure stability, and control erosion on final-graded slopes, if the terraces are compatible with the approved postmining land use; or

(2) Specialized grading, foundation conditions, or roads are required for
the approved postmining land use, in which case the final grading may include a terrace of adequate width to ensure the safety, stability, and erosion control necessary to implement the postmining land-use plan.

(h) Small depressions may be constructed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist re-vegetation.

(i) Permanent impoundments may be approved if they meet the requirements of §§817.49 and 817.56 and if they are suitable for the approved postmining land use.

(j) Preparation of final-graded surfaces shall be conducted in a manner that minimizes erosion and provides a surface for replacement of topsoil that will minimize slippage.

(k) The postmining slope may vary from the approximate original contour when approval is obtained from the regulatory authority for—

(1) A variance from approximate original contour requirements in accordance with §785.16 of this chapter; or

(2) Incomplete elimination of highwalls in previously mined areas in accordance with §817.106.

(l) Regrading of settled and revegetated fills to achieve approximate original contour at the conclusion of underground mining activities shall not be required if the conditions of paragraph (l)(1) or (l)(2) of this section are met.

(i) Settled and revegetated fills shall be composed of spoil or non-acid- or non-toxic-forming underground development waste.

(ii) The spoil or underground development waste shall not be located so as to be detrimental to the environment, to the health and safety of the public, or to the approved postmining land use.

(iii) Stability of the spoil or underground development waste shall be demonstrated through standard geotechnical analysis to be consistent with backfilling and grading requirements for material on the solid bench (1.3 static safety factor) or excess spoil requirements for material not placed on a solid bench (1.5 static safety factor).

(iv) The surface of the spoil or underground development waste shall be vegetated according to §817.116, and surface runoff shall be controlled in accordance with §817.43.

(2) If it is determined by the regulatory authority that disturbance of the existing spoil or underground development waste would increase environmental harm or adversely affect the health and safety of the public, the regulatory authority may allow the existing spoil or underground development waste pile to remain in place. The regulatory authority may require stabilization of such spoil or underground development waste in accordance with the requirements of paragraphs (l)(1)(i) through (l)(1)(iv) of this section.


§ 817.106 Backfilling and grading: Previously mined areas.

(a) Remining operations on previously mined areas that contain a preexisting highwall shall comply with the requirements of §§817.102 through 817.107 of this chapter, except as provided in this section.

(b) The requirements of §817.102(a) (1) and (2) requiring that elimination of highwalls shall not apply to remining operations where the volume of all reasonably available spoil is demonstrated in writing to the regulatory authority to be insufficient to completely backfill the reaffected or enlarged highwall, The highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

(1) All spoil generated by the remining operation and any other reasonably available spoil shall be used to backfill the area. Reasonably available spoil in the immediate vicinity of the remining operation shall be included within the permit area.

(2) The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.

(3) Any highwall remnant shall be stable and not pose a hazard to the