**Section 1817.102 Backfilling and Grading: General Grading Requirements**

a) Disturbed areas shall be backfilled and graded to:

1) Achieve the approximate original contour, except as provided in subsection (k);

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

3) Achieve a post-mining 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 in accordance with Sections 1817.42 and 1817.95; and

5) Support the approved post-mining land use.

b) Spoil, except as provided in subsection (l), and except excess spoil disposed of in accordance with Sections 1817.71 through 1817.74, shall be returned to the mined-out area.

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

d) Spoil may be placed on the area outside the mined-out 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 Section 1817.22.

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 area shall be in accordance with Sections 1817.81 and 1817.83, 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 material, or treated, to control the impact on surface and ground water in accordance with Section 1817.41, to prevent sustained combustion, and to be in compliance with the revegetation requirements of Section 1817.111(a) and the approved post-mining land use.

g) Cut-and-fill terraces may be allowed by the Department where:

1) Needed to conserve soil moisture to ensure revegetation, ensure stability, and control erosion on final graded slopes, if the terraces are compatible with the approved post-mining land use, in accordance with Sections 1817.41, 1817.95 and 1817.111; or

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

h) Small depressions may be constructed if they are needed to minimize erosion, create and enhance wildlife habitat, or assist revegetation by retaining moisture, in accordance with Sections 1817.71, 1817.95, 1817.97 and 1817.111.

i) Permanent impoundments may be approved if they meet the requirements of Sections 1817.49 and 1817.56.

j) Preparation of final graded surfaces shall be conducted in a manner that minimizes erosion in accordance with Section 1817.45 and provides a surface for replacement of topsoil that will minimize slippage such as discing and scarification.

k) The post-mining slope may vary from the approximate original contour when approval is obtained from the Department for:

1) A variance from approximate original contour requirements in accordance with 62 Ill. Adm. Code 1785.16; or

2) Incomplete elimination of highwalls in previously mined areas in accordance with Section 1817.106.

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 subsection (l)(1) or (l)(2) are met.

1)

A) Settled and revegetated fills shall be composed of spoil or nonacid- or nontoxic-forming underground development waste.

B) 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 post-mining land use.

C) 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).

D) The surface of the spoil or underground development waste shall be vegetated according to Section 1817.116 and surface runoff shall be controlled in accordance with Section 1817.43.

2) If it is determined by the Department 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 Department may allow the existing spoil or underground development waste pile to remain in place. The Department may require stabilization of such spoil or underground development waste in accordance with the requirements of subsections (l)(1)(A) through (l)(1)(D).

(Source: Amended at 11 Ill. Reg. 8250, effective July 1, 1987)