**Section 1816.102 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)(3)(C) (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 1816.42 and 1816.95; and

5) Support the approved post-mining land use.

b) Spoil, except excess spoil disposed of in accordance with Sections 1816.71 through 1816.74, 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 1816.22.

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 1816.81 and 1816.83, 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 groundwater in accordance with Section 1816.41, to prevent sustained combustion, and to be in compliance with the revegetation requirements of Section 1816.111(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 1816.41, 1816.95 and 1816.111; 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 1816.41, 1816.95, 1816.97 and 1816.111.

i) Permanent impoundments may be approved if they meet the requirements of Sections 1816.49 and 1816.56 .

j) Preparation of final-graded surfaces shall be conducted in a manner that minimizes erosion in accordance with Section 1816.45 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:

1) The standards for thin overburden in Section 1816.104 are met;

2) The standards for thick overburden in Section 1816.105 are met; or

3) Approval is obtained from the Department for:

A) Mountaintop removal operations in accordance with 62 Ill. Adm. Code 1785.14;

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

C) Incomplete elimination of highwalls in previously mined areas in accordance with Section 1816.106.

(Source: Amended at 14 Ill. Reg. 11830, effective January 1, 1991)