**Section 1816.46 Hydrologic Balance: Siltation Structures**

a) Definitions. For the purpose of this Section only:

1) Siltation structure means a sedimentation pond, a series of sedimentation ponds, or other treatment facility.

2) Disturbed area shall not include those areas:

A) In which the only surface mining activities include diversion ditches, siltation structures, or roads that are designed, constructed, and maintained in accordance with this Part; and

B) For which the upstream area is not otherwise disturbed by the permittee.

3) Other treatment facilities means any chemical treatments, such as flocculation, or mechanical structures, such as clarifiers, that have a point-source discharge and that are utilized to prevent additional contributions of suspended solids to stream flow or runoff outside the permit area, or to comply with all applicable State and federal water quality laws and regulations.

b) General Requirements

1) Additional contributions of suspended solids sediment to stream flow or runoff outside the permit area shall be prevented to the extent possible using the best technology currently available.

2) All surface drainage from the disturbed area shall be passed through a siltation structure before leaving the permit area, except as provided in subsection (b)(5) or (e).

3) Siltation structures for an area shall be constructed before beginning any surface mining activities in that area and, upon construction, shall be sealed by a qualified registered professional engineer to be constructed as designed and as approved in the reclamation plan.

4) Any siltation structure which impounds water shall be designed, constructed, and maintained in accordance with Section 1816.49.

5) Siltation structures shall be maintained until removal is authorized by the Department and the disturbed area has been stabilized and revegetated. In no case shall the structure be removed sooner than two years after the last augmented seeding.

6) When a siltation structure is removed, the land on which the siltation structure was located shall be regraded and revegetated in accordance with the reclamation plan and Sections 1816.111 through 1816.117. Sedimentation ponds approved by the Department for retention as permanent impoundments shall be exempted from this requirement.

7) The Department encourages the retention of sedimentation ponds which will receive drainage from agricultural areas in the post-mining land use plan.

c) Sedimentation ponds

1) When used, sedimentation ponds shall:

A) Be used individually or in series;

B) Be located as near as possible to the disturbed area and out of perennial streams unless approved by the Department in accordance with Section 1816.57; and

C) Be designed, constructed, and maintained to:

i) Provide adequate sediment storage volume;

ii) Provide adequate detention time to allow the effluent from the ponds to meet effluent limitations specified in Section 1816.42;

iii) Contain or treat the ten year, 24 hour precipitation event ("design event") unless a lesser design event is approved by the Department based on terrain, climate, other site specific conditions, and on a demonstration by the permittee that the effluent limitations of Section 1816.42 will be met;

iv) Provide a nonclogging dewatering device adequate to maintain the detention time required under subsection (c)(1)(C)(ii);

v) Minimize, to the extent possible, short circuiting;

vi) Provide periodic sediment removal sufficient to maintain adequate volume for the design event;

vii) Ensure against excessive settlement;

viii) Be free of sod, large roots, frozen soil, and acid- or toxic-forming coal processing waste; and

ix) Be compacted properly.

2) Spillways. A sedimentation pond shall include either a combination of principal and emergency spillways or a single spillway configured as specified in Section 1816.49(a)(9) of this Part.

d) Other treatment facilities

1) Other treatment facilities shall be designed to treat the ten year, 24 hour precipitation event unless a lesser design event is approved by the Department based on terrain, climate, other site specific conditions, and a demonstration by the permittee that the effluent limitations of Section 1816.42 will be met.

2) Other treatment facilities shall be designed in accordance with the applicable requirements of subsection (c).

e) Exemptions. Exemptions to the requirements to pass all drainage from disturbed areas through a siltation structure may be granted if the disturbed drainage area within the total disturbed area is small; and

1) Alternate sediment control measures as described in Section 1816.45(b) are used in lieu of a siltation structure, and the permittee demonstrates that siltation structures are not necessary for drainage from the disturbed area to meet the effluent limitations and water quality standards for the receiving waters set forth in Section 1816.42; or

2) The permittee demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed area to meet the effluent limitations and water quality standards for the receiving waters set forth in Section 1816.42.

(Source: Amended at 24 Ill. Reg. 5967, effective March 21, 2000)