OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT

****POLICY/PROCEDURE DIRECTIVE****

ENGINEERING 03-2

Subject: Application of USDA, SCS Technical Release No. 60

Effective: July 22, 2003

Purpose: To define the application of the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60, "Earth Dams and Reservoirs," 1985 as it relates to impoundments constructed under the requirements of Ohio Administrative Code (OAC) Section 1501:13-9-04.

OAC 1501:13-4-05, 13-4-14 and 13-9-04 were recently revised to include a reference to the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60, "Earth Dams and Reservoirs" (1985) (TR-60) as these sections relate to the construction of impoundments on coal mining sites. Specifically, OAC Section 1501:13-9-04 (H)(1)(a) incorporates this publication by reference. The limited application of this publication is outlined below.

The three OAC rules identified in the preceding paragraph each reference the criteria of 30 CFR 77.216 (a) and the Class B or C criteria for dams in TR-60. 30 CFR 77.216 is the federal mine safety standard that requires specific design and construction standards for impoundments that meet a specific size or hazard criteria. The TR-60 classifications are based on hazard designations with only the B or C classifications being applicable under these rules. The section of TR-60 which defines Class B or C dams is found on page 1-1 of the publication and relates, not to size of the impoundment, but to the potential for damage downstream in the event of a failure of the dam. The concept of downstream safety is currently a factor in evaluations related to MSHA requirements. Ohio Administrative Code Sections 1501:13-4-05(H)(2)(c) and1501:13-4-14(H)(2)(c) previously required an evaluation of the downstream hazards associated with impoundments. This potential hazard evaluation must be conducted during the permit application process.

These rules require that proposed impoundments which meet the Technical Release No.60, Class B or C hazard classification be designed and constructed to comply with the freeboard hydrograph criteria in the "Minimum Emergency Spillway Hydrologic Criteria" table in TR-60 found in Table 2-5. In simpler terms, it must meet a freeboard criteria designed to reduce or eliminate the potential for overtopping of the dam.

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The rule revisions also require that proposed impoundments, which meet the Class B or C hazard classification, include spillways designed and constructed to pass the design precipitation event criteria in the "Minimum Emergency Spillway Hydrologic Criteria" table of TR-60 (Table 2-5).

These factors must be taken into consideration in the design, construction, certification and verification of impoundments constructed under Chapter 1513. These criteria are included in the permit application requirements of OAC 1501:13-4-05, 1501:13-4-14 as well as 1501:13-9-04.

OAC Chapter 1501 does not authorize the application of any other components of Technical Release No. 60. Likewise, any references or requirements in TR-60 related to Class A impoundments are not applicable under these rule revisions. Also note that the limitations described by this policy do not relieve the permittee from any design or construction criteria that may be required by other governmental agencies with jurisdiction over impoundments.

If you have any questions regarding the application of Technical Release No. 60 as provided by these revised rules please direct them to Tom Hines.

Thomas Tugend

Thomas Tugend, Deputy Chief