

channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(c) *Placement.* (1) All vegetative and organic materials shall be removed from the disposal area prior to placement of coal mine waste. Topsoil shall be removed, segregated and stored or redistributed in accordance with § 816.22. If approved by the regulatory authority, organic material may be used as mulch, or may be included in the topsoil to control erosion, promote growth of vegetation or increase the moisture retention of the soil.

(2) The final configuration of the refuse pile shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the refuse pile if required for stability, control or erosion, conservation of soil moisture, or facilitation of the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h:1v (50 percent).

(3) No permanent impoundments shall be allowed on the completed refuse pile. Small depressions may be allowed by the regulatory authority if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation, and if they are not incompatible with stability of the refuse pile.

(4) Following final grading of the refuse pile, the coal mine waste shall be covered with a minimum of 4 feet of the best available, nontoxic and non-combustible material, in a manner that does not impede drainage from the underdrains. The regulatory authority may allow less than 4 feet of cover material based on physical and chemical analyses which show that the requirements of §§ 816.111 through 816.116 will be met.

(d) *Inspections.* A qualified registered professional engineer, or other qualified professional specialist under the direction of the professional engineer, shall inspect the refuse pile during construction. The professional engineer or specialist shall be experienced in the construction of similar earth and waste structures.

(1) Such inspections shall be made at least quarterly throughout construction and during critical construction

periods. Critical construction periods shall include at a minimum:

(i) Foundation preparation including the removal of all organic material and topsoil; (ii) placement of underdrains and protective filter systems; (iii) installation of final surface drainage systems; and (iv) the final graded and revegetated facility. Regular inspections by the engineer or specialist shall also be conducted during placement and compaction of coal mine waste materials. More frequent inspections shall be conducted if a danger of harm exists to the public health and safety or the environment. Inspections shall continue until the refuse pile has been finally graded and revegetated or until a later time as required by the regulatory authority.

(2) The qualified registered professional engineer shall provide a certified report to the regulatory authority promptly after each inspection that the refuse pile has been constructed and maintained as designed and in accordance with the approved plan and this chapter. The report shall include appearances of instability, structural weakness, and other hazardous conditions.

(3) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with coal mine waste. If the underdrain system is constructed in phases, each phase shall be certified separately. The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

(4) A copy of each inspection report shall be retained at or near the minesite.

[48 FR 44028, Sept. 26, 1983]

§ 816.84 Coal mine waste: Impounding structures.

New and existing impounding structures constructed of coal mine waste or intended to impound coal mine waste shall meet the requirements of § 816.81.

(a) Coal mine waste shall not be used for construction of impounding structures unless it has been demonstrated to the regulatory authority that the stability of such a structure conforms to the requirements of this part and the use of coal mine waste will not have a detrimental effect on downstream water quality or the environment due to acid seepage through the impounding structure. The stability of the structure and the potential impact of acid mine seepage through the impounding structure shall be discussed in detail in the design plan submitted to the regulatory authority in accordance with § 780.25 of this chapter.

(b)(1) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste shall be designed, constructed and maintained in accordance with § 816.49 (a) and (c). Such structures may not be retained permanently as part of the approved postmining land use.

(2) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste that meets the criteria of § 77.216(a) of this title shall have sufficient spillway capacity to safely pass, adequate storage capacity to safely contain, or a combination of storage capacity and spillway capacity to safely control, the probable maximum precipitation of a 6-hour precipitation event, or greater event as specified by the regulatory authority.

(c) Spillways and outlet works shall be designed to provide adequate protection against erosion and corrosion. Inlets shall be protected against blockage.

(d) *Drainage control.* Runoff from areas above the disposal facility or runoff from surface of the facility that may cause instability or erosion of the impounding structure shall be diverted into stabilized diversion channels designed to meet the requirements of § 816.43 and designed to safely pass the runoff from a 100-year, 6-hour design precipitation event.

(e) Impounding structures constructed of or impounding coal mine waste shall be designed so that at least 90 percent of the water stored during the design precipitation event can be removed within a 10-day period.

(f) For an impounding structure constructed of or impounding coal mine waste, at least 90 percent of the water stored during the design precipitation event shall be removed within the 10-day period following the design precipitation event.

[48 FR 44029, Sept. 26, 1983, as amended at 53 FR 43606, Oct. 27, 1988]

§ 816.87 Coal mine waste: Burning and burned waste utilization.

(a) Coal mine waste fires shall be extinguished by the person who conducts the surface mining activities, in accordance with a plan approved by the regulatory authority and the Mine Safety and Health Administration. The plan shall contain, at a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

(b) No burning or burned coal mine waste shall be removed from a permitted disposal area without a removal plan approved by the regulatory authority. Consideration shall be given to potential hazards to persons working or living in the vicinity of the structure.

[48 FR 44029, Sept. 26, 1983]

§ 816.89 Disposal of noncoal mine wastes.

(a) Noncoal mine wastes including, but not limited to grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, lumber and other combustible materials generated during mining activities shall be placed and stored in a controlled manner in a designated portion of the permit area. Placement and storage shall ensure that leachate and surface runoff do not degrade surface or ground water, that fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

(b) Final disposal of noncoal mine wastes shall be in a designated disposal site in the permit area or a State-approved solid waste disposal area. Disposal sites in the permit area shall be designed and constructed to ensure