Ohio Administrative Code

Rule 1501:13-9-09 Disposal of coal mine wastes and noncoal mine wastes.

Effective: October 28, 2010

(A) Coal mine waste. General requirements.

(1) General. All coal mine waste shall be placed in new or existing disposal areas within a permit area, which are approved by the chief for this purpose. Coal mine waste shall be placed in a controlled manner to:

(a) Minimize adverse effects of leachate and surface-water runoff on surface and ground water quality and quantity;

(b) Ensure mass stability and prevent mass movement during and after construction;

(c) Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;

(d) Not create a public hazard; and

(e) Prevent combustion.

(2) Coal mine waste material from operations located outside a permit area may be disposed of in the permit area only if approved by the chief. Approval shall be based upon a showing that such disposal will be in accordance with the standards of this rule.

(3) Design certification.

(a) The disposal facility shall be designed using current, prudent engineering practices and shall meet any design criteria established by the chief. An engineer experienced in the design of similar earth and waste structures shall certify the design of the disposal facility.

(b) The disposal facility shall be designed to attain a minimum long-term static safety factor of 1.5, except that a long-term static safety factor of 1.3 shall be achieved when coal mine wastes are disposed of in the mined-out area under paragraph (J)(3) of rule 1501:13-9-14 of the Administrative Code. The foundation and abutments must be stable under all conditions of construction.

(4) Foundation. Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of the foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the disposal facility.

(5) Emergency procedures. If any examination or inspection discloses that a potential hazard exists, the chief shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the chief shall be notified immediately. The chief shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(6) Disposal in excess spoil fills. Coal mine waste may be disposed of in excess spoil fills in accordance with paragraph (J) of rule 1501:13-9-07 of the Administrative Code.

(7) Underground disposal. Coal mine waste may be disposed of in underground mine workings, but only in accordance with a plan approved by the chief and MSHA under paragraph (N) of rule 1501:13-4-14 of the Administrative Code.

(B) Refuse piles. Refuse piles shall meet the requirements of paragraph (A) of this rule, the additional requirements of paragraph (B) of this rule, and the requirements of 30 C.F.R. 77.214 and 77.215.

(1) Drainage control.

(a) If the disposal area contains springs, natural or man-made water courses, or wet weather seeps, the design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the disposal facility and ensure stability.

(b) Uncontrolled surface drainage may not be diverted over the outslope of the refuse piles. Runoff from the areas above the refuse pile and runoff from the surface of the refuse pile shall be diverted into stabilized diversion channels designed to meet the requirements of paragraph (F) of rule 1501:13-9-04 of the Administrative Code to pass safely the runoff from a one-hundred-year, six-hour precipitation event. Runoff diverted from undisturbed areas need not be commingled with runoff from the surface of the refuse pile.

(c) Underdrains shall comply with the requirements of paragraph (F) of rule 1501:13-9-07 of the Administrative Code.

(2) Surface area stabilization. Slope protection shall be provided to minimize surface erosion. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(3) Placement.

(a) 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 rule 1501:13-9-03 of the Administrative Code. If approved by the chief, organic materials 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.

(b) 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 of 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.

(c) No permanent impoundments shall be allowed on the completed refuse pile. Small depressions may be allowed by the chief 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.

(d) Following final grading of the refuse pile, the coal mine waste shall be covered with a minimum

of four feet of the best available nontoxic and noncombustible material, in a manner that does not impede drainage from the underdrains. The chief may allow less than four feet of cover material based on physical and chemical analyses which show that the requirements of rule 1501:13-9-15 of the Administrative Code will be met.

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

(a) Inspections by the engineer or specialist 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 disposal area.

(b) 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 to the environment. Inspection shall continue until the refuse pile has been finally graded and revegetated or until a later time as required by the chief.

(c) The engineer shall provide a certified report to the chief promptly after each inspection that the refuse pile has been constructed and maintained as designed and in accordance with the approved plan and these rules. The report shall include appearances of instability, structural weakness, and other hazardous conditions. A copy of each inspection report shall be retained at or near the minesite.

(d) The certified report required under paragraph (B)(4)(c) of this rule 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 identify the site specifically and clearly.

(C) Impounding structures. New and existing impounding structures constructed of coal mine waste or intended to impound coal mine waste shall meet the requirements of paragraph (A) of this rule and the additional requirements of paragraph (C) of this rule.

(1) Coal mine waste shall not be used for construction of impounding structures unless it has been demonstrated to the chief that the stability of such a structure comforms to the requirements of this rule 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 chief in accordance with paragraph (H) of rule 1501:13-4-05 or paragraph (H) of rule 1501:13-4-14 of the Administrative Code.

(a) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste shall be designed, constructed and maintained in accordance with the requirements for temporary impoundments under paragraph (H) of rule 1501:13-9-04 of the Administrative Code. Such structures may not permanently retain the ability to impound as part of the approved postmining land use.

(b) If an impounding structure constructed of coal mine waste or intended to impound coal mine waste meets the criteria of 30 C.F.R. 77.216(a), the combination of principal and emergency spillways shall be able to pass safely the probable maximum precipitation of a six-hour precipitation event, or greater event as specified by the chief.

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

(4) Drainage control. Runoff from areas above the disposal facility or runoff from surface of the facility that may cause instability or erosion on the impounding structure shall be diverted into stabilized diversion channels designed to meet the requirements of paragraph (F) of rule 1501:13-9-

04 of the Administrative Code and designed to pass safely the runoff from a one-hundred-year, six-hour design precipitation event.

(5) Impounding structures constructed of or impounding coal mine waste shall be designed so that at least ninety per cent of the water stored during the design precipitation event can be removed within a ten-day period. Within ten days following the occurrence of the design precipitation event, ninety per cent of the water shall be removed.

(D) Burning and burned waste utilization.

(1) Coal mine waste fires shall be extinguished by the person who conducts the coal mining operations, in accordance with a plan approved by the chief and MSHA. The plan shall contain, at a minimum, provisions to ensure that only those persons authorized by the permittee, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

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

(E) Disposal of noncoal mine wastes.

(1) Noncoal mine wastes including, but not limited to, grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, lumber and other combustible materials generated during coal mining operations 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.

(2) Final disposal of noncoal mine wastes, as described in paragraph (E)(1) of this rule, 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 that leachate and drainage from the noncoal mine waste area does not degrade surface or underground water. Wastes shall be routinely compacted and covered to prevent combustion and wind-borne waste. When the disposal is

completed, a minimum of two feet of soil cover shall be placed over the site, slopes stabilized, and revegetation accomplished in accordance with rule 1501:13-9-15 of the Administrative Code. Operation of the disposal site shall be conducted in accordance with all local, state, and federal requirements.

(3) At no time shall any noncoal mine waste be deposited in a refuse pile or impounding structure, nor shall an excavation for a noncoal mine waste disposal site be located within eight feet of any coal outcrop or coal storage area.

(4) Notwithstanding any other provision in these rules, any noncoal mine waste defined as "hazardous" under section 3001 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C., Chapter 82, Subchapter III, Section 6921 et seq., as amended) and 40 CFR part 261 shall be handled in accordance with the requirements of Subtitle C of RCRA (42 U.S.C., Chapter 82, Subchapter III, Section 6921 et seq. as amended) and 40 CFR parts 260 to 270.

(F) For dates of federal rules and federal laws referenced in this rule, see rule 1501:13-1-14 of the Administrative Code.