324.63527 Performance standards.

Sec. 63527. (1) A permit issued under this part to conduct surface coal mining operations shall require that the operations meet the performance standards provided in subsection (2).

(2) Except as otherwise provided in this part, all surface coal mining and reclamation operations shall require the operator to do all of the following:

(a) Conduct surface coal mining operations in a manner that maximizes the utilization and conservation of the solid fuel resource being recovered to prevent reaffecting the land in the future through subsequent surface coal mining.

(b) Restore the land affected to a condition capable of supporting the uses that it was capable of supporting prior to any mining, or higher or better uses if priority is given to restoration of agricultural land to agricultural uses, if that use does not present an actual or probable hazard to public health or safety or pose an actual or probable threat of water diminution or pollution, and if the declared proposed land use in the permit application following reclamation is not inconsistent with applicable land use policies and plans, does not involve unreasonable delay in implementation, and is and is not in violation of a law of this state or the United States or a local ordinance.

(c) Backfill; compact, where advisable to ensure stability or to prevent leaching of toxic materials; and grade in order to restore the approximate original contour of the land with all highwalls, spoil piles, and depressions eliminated, unless small depressions are needed in order to retain moisture to assist revegetation or as otherwise authorized pursuant to this part. However, for surface coal mining that is carried out at the same location over a substantial period of time where the operation transects the coal deposit and the thickness of the coal deposits is large relative to the volume of the overburden and if the operator demonstrates that the overburden and other spoil and waste materials at a particular point in the permit area or otherwise available from the entire permit area is insufficient, giving due consideration to volumetric expansion to restore the approximate original contour, the operator, at a minimum, shall backfill, grade, and compact using all available overburden and other spoil and waste materials to attain the lowest practicable grade but not more than the angle of repose, to provide adequate drainage, and to cover all acid-forming and other toxic materials, in order to achieve an ecologically sound land use compatible with the surrounding region. In addition, in surface coal mining, where the volume of overburden is large relative to the thickness of the coal deposit and if the operator demonstrates that due to volumetric expansion the amount of overburden and other spoil and waste materials removed in the course of the mining operation is more than sufficient to restore the approximate original contour, the operator shall, after restoring the approximate contour, backfill, grade, and compact the excess overburden and other spoil and waste materials to attain the lowest grade but not more than the angle of repose and to cover all acid-forming and other toxic materials, in order to achieve an ecologically sound land use compatible with the surrounding region. In all cases, the overburden or spoil shall be shaped and graded to prevent slides, erosion, and water pollution and shall be revegetated in accordance with a plan for revegetation developed in cooperation with each soil conservation district affected by the surface coal mining operation and the requirements of this part.

(d) Stabilize and protect all surface areas, including spoil piles, affected by the surface coal mining and reclamation operation and effectively control erosion and attendant air and water pollution.

(e) Remove the topsoil from the land in a separate layer and replace it on the backfill area. Except that, if the topsoil is not utilized immediately, the operator shall be required to segregate it in a separate pile from other spoil and, when the topsoil is not replaced on a backfill area within a time short enough to avoid deterioration of the topsoil, maintain a successful cover by quick-growing plant or other means so that the topsoil is preserved from wind and water erosion, remains free of any contamination by other acid or toxic materials, and is in a usable condition for sustaining vegetation when restored during reclamation. However, if topsoil is of insufficient quantity or of poor quality for sustaining vegetation requirements imposed in this subpart and subpart 3, or if other strata can be shown to be more suitable for vegetation requirements imposed in this subpart and subpart 3, then the operator shall remove, segregate, and preserve in a like manner the other strata that are best able to support vegetation.

(f) Restore the topsoil or the available subsoil that is best able to support vegetation.

(g) If agricultural land is to be mined and reclaimed, the specifications for soil removal, storage, replacement, and reconstruction shall be established by the department of agriculture in consultation with the secretary of the United States department of agriculture, and the operator is, at a minimum, required to do all of the following:

(*i*) Segregate the A horizon of the natural soil, except where it can be shown that other available soil

materials will create a final soil having a greater productive capacity. If the A horizon of the natural soil is not utilized immediately, it shall be stockpiled separately from other spoil and provided protection from wind and water erosion or contamination by other acid or toxic material.

(*ii*) Segregate the B horizon of the natural soil, or underlying C horizons or other strata, or a combination of those horizons or other strata that are shown to be both texturally and chemically suitable for plant growth and that can be shown to be equally or more favorable for plant growth than the B horizon, in sufficient quantities to create in the regraded final soil a root zone of comparable depth and quality to that which existed in the natural soil. If the B and C horizons of the natural soil are not utilized immediately, they shall be stockpiled separately from other spoil and provided protection from wind and water erosion or contamination by other acid or toxic material.

(*iii*) Replace and regrade the root zone material described in subparagraph (*ii*) with proper compaction and uniform depth over the regraded spoil material.

(*iv*) Redistribute and grade in a uniform manner the surface soil horizon described in subparagraph (*i*).

(h) Create, if authorized in the approved mining and reclamation plan and permit, permanent impoundments of water on mining sites as part of reclamation activities but only when all of the following are adequately demonstrated:

(*i*) The size of the impoundment is adequate for its intended purposes.

(*ii*) The impoundment dam construction will be designed to achieve necessary stability with an adequate margin of safety compatible with that of structures constructed under the watershed protection and flood prevention act, chapter 656, 68 Stat. 666.

(*iii*) The quality of impounded water will be suitable on a permanent basis for its intended use, and discharges from the impoundment will not degrade the water quality in the receiving stream below water quality standards established pursuant to applicable federal and state law.

(*iv*) The level of water will be stable.

(*v*) Final grading will provide safety and access for proposed water users.

(*vi*) The water impoundments will not result in the diminution of the quality or quantity of water utilized by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.

(*vii*) The impoundment is consistent with the laws of this state or the United States; rules and regulations of this state or the United States; or local ordinance.

(i) Conduct an augering operation associated with surface mining in a manner to maximize recoverability of coal reserves remaining after the operation and reclamation are complete, and seal all auger holes with an impervious and noncombustible material in order to prevent drainage, except where the department determines that the resulting impoundment of water in the auger holes may create a hazard to the environment or the public health or safety. The department may prohibit augering under standards established by rule if necessary to maximize the utilization, recoverability, or conservation of solid fuel resources or to protect against adverse water quality impacts.

(j) Minimize disturbances to the prevailing hydrologic balance at the mine site and in associated off-site areas and to the quality and quantity of water in surface and groundwater systems both during and after surface coal mining operations and during reclamation by:

(*i*) Avoiding acid or other toxic mine drainage by preventing or removing water from contact with toxic-producing deposits; treating drainage to reduce toxic content that adversely affects downstream water on being released to water courses; or casing, sealing, or otherwise managing bore holes, shafts, and wells and keeping acid or other toxic drainage from entering surface water and groundwater.

(*ii*) Conducting surface coal mining operations to prevent, to the extent possible using technology currently available, additional contributions of suspended solids to streamflow or runoff outside the permit area, except that contributions shall not be in excess of requirements set by applicable state or federal law.

(*iii*) Constructing any siltation structures pursuant to subparagraph (*ii*) prior to commencement of surface coal mining operations. A siltation structure shall be certified by a qualified registered engineer and shall be constructed as designed and approved in the reclamation plan.

(*iv*) Cleaning out and removing temporary or large settling ponds or other siltation structures from drainways after disturbed areas are revegetated and stabilized and depositing the silt and debris at a site in a manner approved by the department.

(*v*) Restoring recharge capacity of the mined area to approximate premining conditions.

(*vi*) Avoiding channel deepening or enlargement in operations requiring the discharge of water from mines.

(*vii*) Other actions as the department may prescribe.

(k) Stabilize all waste piles in designated areas with respect to surface disposal of mine wastes, tailings, coal processing wastes, and other wastes in areas other than the mine working or excavation through construction in compacted layers including the use of incombustible and impervious materials, if necessary,

and assure that the final contour of the waste pile will be compatible with natural surroundings and that the site can and will be stabilized and revegetated according to this part.

(*l*) Refrain from surface coal mining within 500 feet of an active or abandoned underground mine to prevent breakthroughs and to protect the health and safety of miners and other persons. However, the department shall allow an operator to mine near, through, or partially through an abandoned underground mine or closer than 500 feet of an active underground mine if the nature, timing, and sequencing of specific surface mine activities with specific underground mine activities are jointly approved by the federal and state agencies and local units of government concerned with surface mine regulation and the health and safety of underground miners, and the operations will result in improved resource recovery, abatement of water pollution, or elimination of hazards to the health and safety of the public.

(m) Design, locate, construct, operate, maintain, enlarge, modify, and remove or abandon, in accordance with the standards and criteria developed pursuant to rules promulgated by the department, all existing and new coal mine waste piles, consisting of mine wastes, tailings, coal processing wastes, or other liquid and solid wastes, and used either temporarily or permanently as a dam or embankment.

(n) Ensure that all debris, acid-forming materials, toxic materials, or materials constituting a fire hazard are treated, buried, compacted, or otherwise disposed of to prevent contamination of surface water or groundwater and that contingency plans are developed to prevent sustained combustion of those materials.

(o) Ensure that explosives are used only in accordance with existing state and federal law and the rules promulgated by the department. Rules promulgated by the department shall require the permittee to do all of the following:

(*i*) Publish the schedule of the planned blasting in a newspaper of general circulation in the vicinity, mailing a copy of the proposed blasting schedule to every resident living within 1/2 mile of the proposed blasting site, and providing daily notice in the vicinity prior to any blasting.

(*ii*) Maintain for a period of at least 3 years and make available for public inspection on request during normal business hours a log detailing the location of the blasts, the pattern and depth of the drill holes, the amount of explosives used per hole, and the order and length of delay in the blasts.

(*iii*) Limit the type of explosives and detonating equipment and the size, timing, and frequency of blasts based upon the physical conditions of the site to prevent injury to persons, damage to public and private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of ground or surface water outside the permit area.

(*iv*) Have all blasting operations conducted pursuant to this part conducted by trained and competent individuals certified by the department.

(*v*) Require the applicant or permittee to conduct a preblasting survey of a structure or dwelling upon the request of a resident or owner of a structure or dwelling within 1/2 mile of the permit area and to submit the survey to the department and a copy of the survey to the resident or owner making the request. The area covered by the survey shall be determined by the department and the survey shall include provisions and shall be conducted pursuant to standards established by rules promulgated by the department.

(p) Ensure that all reclamation efforts proceed in an environmentally sound manner and as contemporaneously as practicable with the surface coal mining operations. However, if the applicant proposes to combine surface mining operations with underground mining operations to assure maximum practical recovery of the coal resources, the department may grant a variance for specific areas within the reclamation plan from the requirement that reclamation efforts proceed as contemporaneously as practicable to permit underground mining operations prior to reclamation if all the following conditions are met:

(*i*) The department finds in writing that:

(A) The applicant has presented, as part of the permit application, specific, feasible plans for the proposed underground mining operations.

(B) The proposed underground mining operations are necessary or desirable to assure maximum practical recovery of the coal resource and will avoid multiple disturbance of the surface.

(C) The plan for the underground mining operations conforms to requirements for underground mining in the jurisdiction and permits necessary for the underground mining operations have been issued by the appropriate authority.

(D) The areas proposed for the variance have been shown by the applicant to be necessary for implementing the proposed underground mining operations.

(E) Significant adverse environmental damage, either on site or off site, will not result from the delay in completion of reclamation as required by this part.

(F) Provisions for the off-site storage of spoil will comply with subdivision (v).

(*ii*) The department has promulgated specific rules to govern the granting of the variances in accordance with this subsection.

(*iii*) The variance granted will be reviewed annually by the department.

(*iv*) The liability under the bond filed by the applicant with the department pursuant to section 63529(2) is for the duration of the underground mining operations and until the requirements of sections 63527(2) and 63528 have been fully complied with.

(q) Ensure that the construction, maintenance, and postmining conditions of access roads into and across the site of operations will control or prevent erosion, siltation, pollution of water, and damage to fish or wildlife, the habitat of fish or wildlife, or public or private property.

(r) Refrain from the construction of roads or other access ways up a stream bed or drainage channel or in such proximity to the channel as to significantly alter or degrade the normal flow of water.

(s) Establish on regraded areas and all other land affected, in cooperation with each soil conservation district affected by the surface coal mining operation, a diverse, effective, and permanent vegetative cover of the same seasonal variety native to the area of land to be affected and capable of self-regeneration and plant succession at least equal in the extent of cover to the natural vegetation of the area. However, introduced species may be used in the revegetation process where desirable and necessary to achieve the approved postmining land use plan.

(t) Assume the responsibility for successful revegetation as required by subdivision (s) for a period of 5 years after the last year of augmented seeding, fertilizing, irrigation, or other work in order to assure compliance with subdivision (s). However, in those areas or regions of the state where the annual average precipitation is 26 inches or less, the operator's assumption of responsibility and liability will extend for a period of 10 years after the last year of augmented seeding, fertilizing, irrigation, or other work. If the department approves long-term intensive agricultural postmining land use, the applicable 5- or 10-year period of responsibility for revegetation commences at the date of initial planting for the long-term intensive agricultural postmining land use, except that if the department issues a written finding approving a long-term intensive agricultural postmining land use as part of the mining and reclamation plan, the department may grant exception to the provisions of subdivision (s).

(u) Protect off-site areas from slides or damage occurring during the surface coal mining and reclamation operations, and not deposit spoil material or locate any part of the operations or waste accumulations outside the permit area.

(v) Place all excess spoil material resulting from coal surface mining and reclamation activities in such a manner that:

(*i*) Spoil is transported and placed in a controlled manner in position for concurrent compaction and in such a way as to assure mass stability and to prevent mass movement.

(*ii*) The areas of disposal are within the bonded permit areas and all organic matter is removed immediately prior to spoil placement.

(*iii*) Appropriate surface and internal drainage systems and diversion ditches are used to prevent spoil erosion and movement.

(*iv*) The disposal area does not contain springs, natural watercourses, or wet weather seeps unless lateral drains are constructed from the wet areas to the main underdrains to prevent filtration of the water into the spoil pile.

(*v*) If placed on a slope, the spoil is placed on the most moderate slope and is placed, where possible, on or above a natural terrace, bench, or berm, if the placement provides additional stability and prevents mass movement.

(*vi*) If the toe of the spoil rests on a downslope, a rock toe buttress of sufficient size to prevent mass movement is constructed.

(*vii*) The final configuration is compatible with the natural drainage pattern and surroundings and suitable for intended uses.

(*viii*) Design of the spoil disposal area is certified by a qualified registered professional engineer in conformance with professional standards.

(*ix*) All other provisions of this part are met.

(w) Meet other criteria necessary to achieve reclamation in accordance with the purposes of this part, taking into consideration the physical, climatological, and other characteristics of the site.

(x) To the extent possible, using the best technology currently available, minimize disturbance and adverse impacts of the operation on fish, wildlife, and related environmental values and, if practicable, achieve enhancement of those resources.

(y) Provide for an undisturbed natural barrier to be retained in place as a barrier to slides and erosion beginning at the elevation of the lowest coal seam to be mined and extending from the outslope for the distance the department determines necessary.

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Popular name: Act 451
Popular name: NREPA