VIRGINIA
MINERAL MINE
RECLAMATION LAWS
AND REGULATIONS

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## Mineral Mine Reclamation Laws of Virginia

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## Virginia Reclamation Regulations for Mineral Mining

**Virginia Administrative Code**  
**Title 4 Conservation and Natural Resources**  
**V.A.C. Agency No. 25 Department of Mines, Minerals and Energy**  
**Chapter 31 Reclamation Regulations for Mineral Mining**

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MINERAL MINE RECLAMATION LAWS OF VIRGINIA

TITLE 45.1.
MINES AND MINING.

CHAPTER 14.1.
ADMINISTRATION.

Section 45.1-161.1. Definitions.
45.1-161.2. Department continued; appointment of Director.
45.1-161.3. Powers of Department.
45.1-161.4. Powers and duties of Director.
45.1-161.5. Establishment of divisions; division heads.
45.1-161.6. Department to serve as lead agency for inspections undertaken subsequent to the issuance of a permit.

§ 45.1-161.1. Definitions.
As used in this title, unless the context requires a different meaning:
"Chief" means the Chief of the Division of Mines of the Department of Mines, Minerals and Energy.
"Department" means the Department of Mines, Minerals and Energy.
"Director" means the Director of the Department of Mines, Minerals and Energy.

History.
1984, c. 590, § 45.1-1.1; 1994, c. 28.

§ 45.1-161.2. Department continued; appointment of Director.
The Department of Mines, Minerals and Energy is continued as an agency within the Secretariat of Commerce and Trade. The Department shall be headed by a Director who shall be appointed by the Governor, subject to confirmation by the General Assembly, to serve at his pleasure for a term coincident with his own.

History.
1984, c. 590, § 45.1-1.1; 1994, c. 28.

Editor's note.
At its 1966 session the General Assembly, by Acts 1966, c. 594, repealed Title 45 and enacted in its place a new Title 45.1, comprising Chapters 1 (§ 45.1-1.1 et seq.) through 14 (§ 45.1-158 et seq.). Former Chapter 15 (§§ 45.1-162 through 45.1-179), also enacted at the 1966 session of the General Assembly, was codified in this title by the Virginia Code Commission.
Chapter 717 of the Acts of 1966 provides: "Whenever, during the regular session of the General Assembly of Virginia of nineteen hundred sixty-six there shall have been enacted any statute purporting to revise, rearrange, amend and recodify any title of the Code of Virginia, such statute shall be deemed to have been enacted prior in time to any other statute
enacted at such session adding to, repealing or amending any portion of such title; and every such other statute shall be deemed to have so added to, repealed or amended and reenacted, as the case may be, such title as so revised, rearranged, amended and recodified; provided, however, that effect shall be given to any such other, or subsequent, statute only to the extent of any apparent changes in the law as it existed prior to such session.”

Acts 1984, c. 590, which added Article 1 of Chapter 1 and Chapters 25 and 26 and enacted, amended, and repealed other sections of Title 45.1, are effective Jan. 1, 1985.

Acts 1984, c. 590, cl. 3 provides: “That no provision of this act shall be construed as authorizing or establishing a program for the permitting of uranium mining.”

Acts 1984, c. 590, cl. 5 provides: “That the Department of Mines, Minerals and Energy shall be deemed the successor in interest to the Division of Mined Land Reclamation and the Division of Mineral Resources [now the Division of Geology and Mineral Resources] in the Department of Conservation and Economic Development, the Division of Mines in the Department of Labor and Industry, and the State Energy Office in the Office of Emergency Services [now Department of Emergency Management] to the extent that this act transfers powers and duties. All rightful title to and interest in any real or tangible personal property or records vested in those existing agencies shall be transferred to and taken as standing in the name of the Department of Mines, Minerals and Energy to the extent that this act transfers powers and duties.”

Acts 1984, c. 590, cl. 6 provides: “That regulations promulgated by the Board of Conservation and Economic Development, the Commissioner of Labor and Industry, and the Chief of the Division of Mines of the Department of Labor and Industry under the authority transferred to the Department of Mines, Minerals and Energy shall remain in force and effect until any such regulation is amended, modified, or repealed by the Department of Mines, Minerals and Energy.”

Acts 1984, c. 28, cl. 2 provides: “That whenever any of the conditions, requirements, provisions, or contents of any section, article, or chapter of Chapters 1 through 14 (§§ 45.1-1.1 through 45.1-161) of Title 45.1 or any other title of this Code as such titles existed prior to July 1, 1994, are transferred in the same or modified form to a new section, article, or chapter of Chapters 14.1 through 14.8 (§§ 45.1-161.1 through 45.1-161.322) of this title or any other title of this Code and whenever any such former section, article, or chapter is given a new number in this or any other title, all references to any such former section, article, or chapter of Chapters 1 through 14 (§§ 45.1-1.1 through 45.1-161) of Title 45.1 or any other title appearing in this Code shall be construed to apply to the new or renumbered section, article, or chapter containing such conditions, requirements, provisions, contents, or sections thereof.”

Acts 1994, c. 28, cl. 3 provides: “That the regulations of the Department of Mines, Minerals, and Energy in effect on the effective date of this act [July 1, 1994] shall continue in effect to the extent that they are not in conflict with this act and shall be deemed to be regulations promulgated under this act.”

§ 45.1-161.3. Powers of Department.

The Department shall have the following powers, all of which, with the approval of the Director, may be exercised by any division of the Department with respect to matters assigned to that division:

1. To employ the personnel required to carry out the purposes of this title;
2. To make and enter into all contracts and agreements necessary or incidental to the performance of its duties and the execution of its powers under this title, including, but not limited to, contracts with the private sector, the United States, other state agencies and governmental subdivisions of the Commonwealth;
3. To accept grants from the United States government and agencies and instrumentalties thereof and any other source. To these ends, the Department shall have the power to comply with any conditions and execute any agreements that are necessary, convenient or desirable;
4. To promulgate regulations necessary or incidental to the performance of duties or execution of powers conferred under this title and other relevant chapters, which regulations shall be promulgated by the Department, the
Chief, or the Director, as appropriate, in accordance with the provisions of Article 2 ($2.2-4006 et seq.) of the Administrative Process Act; and

5. To do all acts necessary or convenient to carry out the purposes of this title.

History.
1984, c. 590, § 45.1-1.3; 1994, c. 28.

§ 45.1-161.4. Powers and duties of Director.

The Director, under the direction and control of the Governor, shall exercise the powers and perform the duties conferred or imposed upon him by law, and shall perform any other duties required of him by the Governor.

History.
1984, c. 590, § 45.1-1.4; 1994, c. 28.

§ 45.1-161.5. Establishment of divisions; division heads.

The following divisions, through which the functions, powers, and duties of the Department may be discharged, are established in the Department: a Division of Mines, a Division of Mined Land Reclamation, a Division of Geology and Mineral Resources, a Division of Gas and Oil, a Division of Mineral Mining, and a Division of Energy. The Director may establish other divisions as he deems necessary. Except as provided in § 45.1-161.15 with respect to the Chief of the Division of Mines, the Director shall appoint persons to direct the various functions and programs of the divisions, and may delegate to the head of any division any of the powers and duties conferred or imposed by law on the Director.

History.
1984, c. 590, § 45.1-1.5; 1990, c. 92; 1994, c. 28; 2008, c. 369.

OPINIONS OF THE ATTORNEY GENERAL

Compulsory pooling orders. — The Virginia Gas and Oil Board may issue compulsory pooling orders that permit deduction of post-production costs downstream of the wellhead when computing gas owners' one-eighth royalty interests. See opinion of Attorney General to Bradley C. Lambert, Chairman, Virginia Gas & Oil Board, Department of Mines, Minerals and Energy, 09-018, 2009 Va. AG LEXIS 26 (6/10/09).

§ 45.1-161.6. Department to serve as lead agency for inspections undertaken subsequent to the issuance of a permit.

Following the issuance of any permit under Chapter 16 (§ 45.1-180 et seq.) or 19 (§ 45.1-226 et seq.) of this title, the Department shall serve as the lead agency for enforcement of the provisions of the permit. Any other agency which has reviewed and approved, or not disapproved, a permit application prior to its approval by the Director shall contact the Director or his designee prior to making any routine inspection. The Director or his designee shall then contact the permittee, if prior contact is to be made, to schedule the inspection and shall accompany any employee of any agency other than the Department during any inspection by such other agency. However, nothing in this section
§ 45.1-161.311:1. Consent required before working mine near land of another.

No owner or tenant of any land containing minerals, within this Commonwealth, shall open or sink, dig, excavate or work in any mine on such land within five feet of the line dividing such land from that of another person, without the consent, in writing, of every person interested in or having title to such adjoining lands or mineral rights in possession, reversion or remainder, or of the guardian of any such person that may be under a disability. If any person violates this section, he shall forfeit $500 to any person injured by such activity and to anyone whose consent is required but not obtained.

History.
1997, c. 390.

§ 45.1-161.311:2. Adjacent owner to be permitted to survey mine; proceedings to compel entry for survey.

A. The owner, tenant, or occupant of any land or minerals, on or in which a mine is opened and worked, or his agent, shall permit any person interested in or having title to any land or mineral rights coterminous with that in which such mine is located, if he has reason to believe his property is being trespassed, to have ingress and egress with surveyors and assistants to explore and survey such mine at his own expense, for the purpose of ascertaining whether a violation of § 45.1-161.311:1 has occurred; however, such person shall not be entitled to enter the property more often than once a month. Every owner, tenant, occupant or agent who shall refuse such permission, exploration or survey shall forfeit twenty dollars for each refusal, to the person so refused.

B. The judge of the general district court of the county or city in which such mine is located, before whom complaint of such refusal shall be made, may issue a summons to such owner, tenant, occupant or agent, to answer such complaint. On the return of the summons executed, and proof that the complainant has right of entry, and that it has been refused without sufficient cause, the judge shall designate an early and convenient time for such entry to be made, and issue his warrant, commanding the sheriff of the county or city.
to attend and prevent obstructions and impediments to such entry, exploration and survey. The costs of such summons, and a fee of three dollars to the sheriff executing the warrant, shall be paid by the person whose refusal caused the complaint. If the court dismisses the complaint, the costs shall be paid by the party making the complaint.

History.
1997, c. 390.

CHAPTER 16.
PERMITS FOR CERTAIN MINING OPERATIONS; RECLAMATION OF LAND.


Section
45.1-180. Definitions.
45.1-180.1. [Repealed.]
45.1-180.2. Legislative findings; declaration of policy.
45.1-180.3. Authority of Director; enforcement of chapter by injunction.
45.1-180.4. Exemption for restricted mining.

Article 2. Regulation of Mining Activity.

45.1-181. Permit required; fee; renewal fee; application; furnishing copy of map, etc., to landowner; approval by Department.
45.1-182. [Repealed.]
45.1-182.1. Operations plan; reclamation; policy of Director.
45.1-183. Bond of operator.
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45.1-184.1. Application for permit; adjoining landowners; local official.
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45.1-186. [Repealed.]
45.1-186.1. Notice of noncompliance served on operator.
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45.1-189, 45.1-190. [Repealed.]
45.1-191. Penalty for violation of chapter, etc.
45.1-192. Assistance of federal, state and local agencies.
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45.1-193.1. Injunction prohibiting mining operation.
45.1-194. Appeals from decisions of the Department.
45.1-195, 45.1-196. [Repealed.]
45.1-197. Local standards and regulations; waiver of application of chapter; review for strict compliance with chapter.

Article 3. Orphaned Lands.

45.1-197.1, 45.1-197.2. [Repealed.]

§ 45.1-197.8. Creation of Fund.
§ 45.1-197.9. Membership in Fund; payments required.
§ 45.1-197.10. Release of bonds and other securities.
§ 45.1-197.11. Return of member payments.
§ 45.1-197.12. Revocation of permits; reclamation work.
§ 45.1-197.13. Collection of debt where cost of reclamation exceeds member’s forfeited payments, etc.
§ 45.1-197.15. Order of return of payments.
§ 45.1-197.16. Discontinuance of Fund.
§ 45.1-197.17. Construction of article; Fund used solely for reclamation.
§ 45.1-197.18. Reclamation funding.

ARTICLE 1.
GENERAL PROVISIONS.

§ 45.1-180. Definitions.

The following words and phrases when used in this chapter shall have the meanings respectively ascribed to them in this section except where the context clearly requires a different meaning:

(a) Mining. — Means the breaking or disturbing of the surface soil or rock in order to facilitate or accomplish the extraction or removal of minerals; any activity constituting all or part of a process for the extraction or removal of minerals so as to make them suitable for commercial, industrial, or construction use; but shall not include those aspects of deep mining not having significant effect on the surface, and shall not include excavation or grading when conducted solely in aid of on-site farming or construction. Nothing herein shall apply to mining of coal. This definition shall not include, nor shall this title, chapter, or section be construed to apply to the process of searching, prospecting, exploring or investigating for minerals by drilling.

(b) Disturbed land. — The areas from which overburden has been removed in any mining operation, plus the area covered by the spoil and refuse, plus any areas used in such mining operation including land used for processing, stockpiling, and settling ponds.

(c) Overburden. — All of the earth and other material which lie above a natural deposit of minerals, ores, rock or other solid matter and also other materials after removal from their natural deposit in the process of mining.

(d) Spoil. — Any overburden or other material removed from its natural state in the process of mining.

(e) Operator. — Any individual, corporation or corporation officer, firm, joint venture, partnership, business trust, association, or any other group or combination acting as a unit, or any legal entity which is engaged in mining.

(f) through (i) [Repealed.]

(j) Mining operation. — Any area included in an approved plan of operation.

(k) Reclamation. — The restoration or conversion of disturbed land to a stable condition which minimizes or prevents adverse disruption and the injurious effects thereof and presents an opportunity for further productive use if such use is reasonable.

Editor’s note.
The repealed section was enacted by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.

§ 45.1-180.2. Legislative findings; declaration of policy.

A. The General Assembly finds that the mining of minerals within the Commonwealth is an activity that makes a contribution to the standard of living of the citizens of the Commonwealth; and that it is in the public interest to insure the availability and orderly development of mineral resources now and in the future. Uncontrolled mining of such minerals and unreclaimed land can adversely affect the environment through the destruction of vegetative cover, the disruption of drainage patterns, the increased siltation and sedimentation of streams as well as other forms of pollution, and the temporary and, in some circumstances, permanent destruction of scenic beauty and...
wildlife habitats. The General Assembly further finds that it is often not practicable to extract minerals without disturbing the surface of the earth and producing waste materials, and that the very character of certain surface mining operations precludes complete restoration of the land to its original contour; but that it is essential to conduct mining in such a way as to minimize its effects on the environment.

B. The General Assembly recognizes that there are wide variations in the circumstances and conditions surrounding and arising out of the mining of minerals and that rehabilitation and conservation of land affected by mining of minerals will be assured only through proper planning, proper use of appropriate methods of mining, consideration of the impact of mining upon the environment as well as the land use of surrounding areas, and through the incorporation and use of control techniques and reclamation actions as an integral and simultaneous part of the mining of minerals.

C. The General Assembly declares that it is in the public interest and shall be the policy of the Commonwealth to require and encourage the proper control of mining of minerals so as to protect the public health, safety and welfare consistent with the protection of physical property and with maximum employment and the economic well-being of the Commonwealth through good industry and sound conservation practices, and to require and encourage thorough operations and reclamation planning, consideration of the surrounding environment, and incorporation of control techniques and reclamation actions in mining operations insofar as economically and physically practicable to assure such proper control of mining. To these ends, the Director is mandated to enforce this chapter and to adopt whatever regulations are found necessary to accomplish the provisions of this chapter.

D. The General Assembly by this chapter intends to exercise the police power of this Commonwealth in a coordinated statewide program to aid in the protection of wildlife, in restoring these lands to productive purposes and to control present and future problems associated with mining resources and the reclamation of disturbed lands to the end that mining activities shall be regulated in a manner that will effectuate the purpose of this chapter.

E. Nothing in this chapter is intended, nor shall be construed, to limit, impair, abridge, create, enlarge or otherwise affect, substantively or procedurally, the right or rights of any person who is a party to any dispute involving property rights, or the right of any person to damages or other relief on account of injury to persons or property due to mining activities regulated by this chapter and to maintain any action or other appropriate procedure therefor; nor to affect the powers of the Commonwealth to initiate, prosecute and maintain actions to abate public nuisances.

History.
1977, c. 312; 1984, c. 590.

§ 45.1-180.3. Authority of Director; enforcement of chapter by injunction.

A. The authority to promulgate rules and regulations to effectuate the provisions and the policy of this chapter and the authority to adopt definitions for use in interpreting this chapter are hereby vested in the Director.

B. The authority to administer and enforce the provisions of this chapter is hereby vested in the Director. In administering and enforcing the provisions of this chapter pursuant to the findings and legislative policy adopted by the
General Assembly, the Director shall exercise the following powers in addition to any other powers conferred upon him by law:

1. To supervise the administration and enforcement of this chapter and all rules and regulations and orders promulgated thereunder;
2. To issue orders to enforce the provisions of this chapter, all rules and regulations promulgated thereunder, and the terms and conditions of any permit;
3. To make investigations and inspections to insure compliance with any provision of this chapter or any rules, regulations, or orders promulgated thereunder;
4. To encourage and conduct investigations, research, experiments and demonstrations, and to collect and disseminate information relating to surface mining and reclamation of lands and waters affected by surface mining;
5. To receive any federal funds, state funds or any other funds and to enter into any contracts, for which funds are available, to carry out the purposes of this chapter.

C. In addition to any administrative remedy granted herein, the Director may petition any court of competent jurisdiction for an injunction against any violation of the provisions of this chapter, and the rules, regulations and orders promulgated hereunder or to compel the performance of acts required thereby without regard to any adequate remedy which may exist at law, such injunction to be issued without bond. However, with regard to the suspension of mining operations, § 45.1-193.1 shall control.

History.
1977, c. 312; 1984, c. 590.

§ 45.1-180.4. Exemption for restricted mining.

Any operator engaging in mining and disturbing less than one acre of land and removing less than 500 tons of minerals at any particular site, is exempt from all mining permit fees and renewal fees and bond requirements of this chapter; provided, however, each person intending to engage in such restricted mining shall submit an application for a permit, a sketch of the mining site and an operations plan, which shall be adhered to in accordance with §§ 45.1-181 and 45.1-182.1. The Director shall approve the application if he determines that the issuance of the permit shall not violate the provisions of this chapter.

History.
1977, c. 312.

ARTICLE 2.
REGULATION OF MINING ACTIVITY.

§ 45.1-181. Permit required; fee; renewal fee; application; furnishing copy of map, etc., to landowner; approval by Department.

It is unlawful for any operator to engage in any mining operation in Virginia, without having first obtained from the Department a permit to engage in such operation and paying a fee therefor of $31 per acre for every acre of land to be affected by the total operation for which plans have been submitted, which shall be deposited in the state treasury in a special fund to be used by the
Director for the administration of this chapter. A permit shall be obtained prior to the start of any mining operation. If within 10 days of the anniversary date of the permit the Director, after inspection, is satisfied that the operation is proceeding according to the plan submitted to and approved by him, then the Director shall renew the permit upon payment of a renewal fee by the operator of $16 per acre for land to be affected by the total operation in the next ensuing year. The renewal fees shall be deposited in the state treasury in the special fund set out above. If the operator believes changes in his original plan are necessary or if additional land not shown as a part of the approved plan of operation is to be disturbed, he shall submit an amended plan of operation which shall be approved by the Director in the same manner as an original plan and shall be subject to the provisions of this section and §§ 45.1-182.1 and 45.1-183. A separate permit shall be secured for each mining operation conducted. Application for a mining permit shall be made in writing on forms prescribed by the Director and shall be signed and sworn to by the applicant or his duly authorized representative. The application, in addition to such other information as may be reasonably required by the Director shall contain the following information: (i) the common name and geologic title, where applicable, of the mineral to be extracted; (ii) a description of the land upon which the applicant proposes to conduct mining operations, which description shall set forth: the name of the county or city in which such land is located; the location of its boundaries and any other description of the land to be disturbed in order that it may be located and distinguished from other lands and easily ascertainable as shown by a map attached thereto showing the amount of land to be disturbed; (iii) the name and address of the owner or owners of the surface of the land; (iv) the name and address of the owner or owners of the mineral, ore or other solid matter; (v) the source of the operator’s legal right to enter and conduct operations on the land to be covered by the permit; (vi) the total number of acres of land to be covered by the permit; (vii) a reasonable estimate of the number of acres of land that will be disturbed by mining operations on the area to be covered by the permit during the ensuing year; (viii) whether any mining permits of any type are now held by the applicant and the number thereof; (ix) the name and address of the applicant, if an individual; the names and addresses of all partners, if a partnership; the state of incorporation and the name and address of its registered agent, if a corporation; or the name and address of the trustee, if a trust; and (x) if known, whether the applicant, or any subsidiary or affiliate or any partnership, association, trust or corporation controlled by or under common control with applicant, or any person required to be identified by clause (ix), has ever had a mining permit of any type issued under the laws of this or any other state revoked or has ever had a mining or other bond, or security deposited in lieu of bond, forfeited. Clause (iv) shall not apply to the shell, container chamber, passage, or open space set forth in § 55-154.2.

The application for a permit shall be accompanied by two copies of an accurate map or aerial photograph or plan and meeting the following requirements:

1. Be prepared by a licensed engineer or licensed land surveyor or issued by a standard mapping service or in such a manner as to be acceptable to the Director;
2. Identify the area to correspond with the land described in the application;
3. Show adjacent deep mining, if any, and the boundaries of surface properties, with the names of owners of the affected area which lie within 100 feet of any part of the affected area;
4. Be drawn to a scale of 400 feet to the inch or better;
5. Show the names and location of all streams, creeks or other bodies of public water, roads, buildings, cemeteries, oil and gas wells, and utility lines on the area affected and within 500 feet of such area;
6. Show by appropriate markings the boundaries of the area of land affected, the outcrop of the seam at the surface or deposit to be mined, and the total number of acres involved in the area of land affected;
7. Show the date on which the map was prepared, the north arrow and the quadrangle name; and
8. Show the drainage plan on and away from the area of land affected, including the directional flow of water, constructed drainways, natural waterways used for drainage and the streams or tributaries receiving the discharge.

Upon receipt of a written request by any landowner on whose property a sand and gravel operation is permitted pursuant to this section, the operator of the sand and gravel operation shall provide a copy of the map, photograph or plan to the landowner.

No permit shall be issued by the Department until the Director has approved the plan of operation required in this section and § 45.1-182.1 and the bond from the applicant as required in § 45.1-183.

History.

Editor's note.
This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.

Acts 2003, cc. 542 and 550, cl. 2 provides: "The Virginia Gas and Oil Board shall increase the fee for filing an application for the establishment of units, spacing, or pooling orders, as provided for in 4 VAC 25-160-30, to $30. Action by the Board to increase this fee shall be exempt from the provisions of the Administrative Process Act (§ 2.2-4000 et seq.)."

Acts 2012, c. 695, cl. 2 provides: "That the provisions of this act shall not be construed to affect any litigation pending in a court of competent jurisdiction on or before July 1, 2012."

The 2012 amendments.
The 2012 amendment by c. 695, in the first paragraph, substituted "is unlawful" for "shall be unlawful" in the first sentence, deleted "hereof" from the end of the fifth sentence, substituted "shall be secured" for "must be secured" in the sixth sentence, in the next-to-last sentence, redesignated clauses (1) through (10) as clauses (i) through (x) and substituted "identified by clause (ix)" for "identified by item (9) above" and added the last sentence; and in the second paragraph, redesignated former items (a) through (h) as items 1 through 8 and made a related change. For applicability provisions, see Editor's note.


Cross references.
As to operations plans, see § 45.1-182.1.

§ 45.1-182.1. Operations plan; reclamation; policy of Director.
A. The application for a permit shall be accompanied by an operations plan in such form and with such accompanying material as the Director shall require. The operations plan shall describe the specifications for surface
grading and restoration, including sketches delineating placement of spoil, stockpiles, and tailing ponds, to a surface that is suitable for the proposed subsequent use of the land after reclamation is completed.

B. The operations plan shall include a provision for reclamation of all land estimated to be affected by the mining operation for which the permit is sought. The reclamation provision shall be in such form and contain such accompanying material as the Director shall require and shall state:

1. The planned use to which the affected land is to be returned through reclamation;

2. Proposed actions to assure suitable reclamation of the affected land for the planned use to be carried out by the applicant as an integral part of the proposed mining operation and to be conducted simultaneously insofar as practicable. The Director shall set schedules for the integration of reclamation with the mining operation according to the various individual mineral types.

C. It shall be the policy of the Director to encourage adoption of productive land use, such as pasture, agricultural use, recreational areas, sanitary landfills, forestry and timberland operations, industrial and building sites, and to consider the general original contour in determining the particular reclamation program for the acreage. The Director may require an amendment to the operations plan to meet the exigencies of any unanticipated circumstance or event.

History.
1977, c. 312; 1984, c. 590.

§ 45.1-183. Bond of operator.

Each operator at the time of filing his application shall furnish bond on a form to be prescribed by the Director payable to the Department and conditioned that the operator shall faithfully perform all of the requirements of this chapter and of the operations plan as approved and directed by the Department. The amount of bond shall be no less than $200 nor more than $1,000 per acre, based upon the number of acres of land which the operator estimates will be affected by mining operations during the next ensuing year. The minimum amount of bond furnished shall be $1,000, except in areas of five acres or less the bond shall be no less than $200 nor more than $1,000 per acre. Such bond shall be executed by the operator and by a corporate surety licensed to do business in this Commonwealth; provided, however, that in lieu of such bond the operator may deposit cash or collateral security acceptable to the Director.

History.

Cross references.
As to release of bonds and other securities posted pursuant to this section, see § 45.1-197.10.

Editor's note.
This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.
§ 45.1-184. Review of operations plan and reclamation provision by Director; issuance of permit.

Upon receipt of a reasonable operations plan and bond prescribed above, the Director shall review the plan and if it meets with his approval issue a permit. If the Director disapproves the plan, he shall furnish the applicant with his written objections thereto and his required amendments. Until the applicant shall amend his operations plan to meet the Director’s reasonable objections and file a satisfactory amended plan with the Director, no permit shall be issued.

In reviewing such plan, if the Director finds that the operation will constitute a hazard to the public safety or welfare, or that a reasonable degree of reclamation or proper drainage control is not feasible, he may disapprove the permit application. Provided, however, that the Director may approve the permit after deleting the areas from the permit application held to be objectionable in the Director’s findings.

The Director shall issue the permit unless he finds that the applicant has had control or has had common control with a person, partnership, association, trust or corporation which has had a mining permit revoked or bond or other security forfeited for failure to reclaim lands as required by the laws of this State, in which event no permit shall be issued. Except, however, if an operator who has heretofore forfeited a bond within thirty days of notice and demand by the Director pays the cost of reclamation in excess of the amount of the forfeited bond, or if any bond is forfeited and the amount forfeited is equal to or greater than the cost of reclamation, such operator shall then become eligible for another permit.

History. 1968, c. 734; 1974, c. 312; 1977, c. 312.

Editor’s note. This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.

§ 45.1-184.1. Application for permit; adjoining landowners; local official.

A. The application for a permit shall be accompanied by a statement showing the names and addresses of the owners of property within one thousand feet of the property line of any land proposed to be permitted and certification that such landowners have been notified by certified mail of the application for a permit unless notified previously. Such residents may file written objections with the Director, and may request a hearing. This section shall apply to initial applications for permits only, and no new notice shall be required for renewal applications or for permits for acreage in addition to that originally permitted.

B. The application for the permit shall also be accompanied by a statement certifying that the chief administrative official of the local political subdivision has been notified of the proposed operation by certified mail.
§ 45.1-184.1  MINERAL MINE RECLAMATION LAWS  § 45.1-185

History.
1977, c. 312.

Law Review.

§ 45.1-184.2. Succession of one operator by another at uncompleted project.

Where one operator succeeds another at any uncompleted operation, whether by sale, assignment, lease, merger, or otherwise, the Director may release the first operator from all liability under this chapter as to that particular operation and transfer the permit to the successor operator; provided, however, that the successor operator has complied with the requirements of this chapter, and the successor operator assumes as part of his obligation under this chapter, all liability for the reclamation of the area of land affected by the first operator. No fee, or any portion thereof, paid by the first operator shall be returned to either operator. The permit fee for the successor operator for the area of land permitted by the first operator shall be $16 per acre, except as provided by § 45.1-180.4. The mining permit for the successor operator shall be valid for one year from the date of issuance and shall be renewed thereafter in accordance with the provisions of this chapter.

History.

Editor's note.
Acts 2003, cc. 542 and 550, cl. 2 provides: “That the Virginia Gas and Oil Board shall increase the fee for filing an application for the establishment of units, spacing, or pooling orders, as provided for in 4 VAC 25-160-30, to $130. Action by the Board to increase this fee shall be exempt from the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).”

Acts 2003, cc. 542 and 550, cl. 3 provides: “That the Department of Mines, Minerals, and Energy shall increase the fee for filing an application to transfer gas or oil permit rights, as provided for in 4 VAC 25-150-120, to $65. Action by the Department to increase this fee shall be exempt from the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).”

§ 45.1-185. Additional bond to be posted annually; release of previous bond; report of reclamation work.

Within ten days following the anniversary date of any permit, the operator shall post additional bond in the amount of no less than $200 nor more than $1,000 per acre for each acre of land estimated by him to be disturbed during the next year following the anniversary date of the permit. Bond or other security previously posted shall be released for the areas disturbed in the last twelve months if reclamation work has been completed or transferred to additional acres to be disturbed. The approval of the Director to release the bond shall be obtained in accordance with the following:

The operator shall file with the Department a written report on a form to be prescribed by the Department stating under oath that reclamation has been completed on certain lands and submit the following:

(a) Identification of the operation; (b) the county or city in which it is located and its location with reference to the nearest public highway; (c) a description of the area of land affected by the operation within the period of time covered by such report with sufficient certainty to enable it to be located and distinguished from other lands; (d) an accurate map or plan prepared by a
licensed land surveyor or licensed engineer or issued by a standard mapping service or in such manner as to be acceptable to the Director showing the boundary lines of the area of land affected by the operation, the number of acres comprising such area and the methods of access to the area from the nearest public highway.

History.
1968, c. 734; 1974, c. 312; 1977, c. 312.

Editor's note.
This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.


Cross references.
As to notice of noncompliance served on the operator, see § 45.1-186.1.

§ 45.1-186.1. Notice of noncompliance served on operator.

A. The Director may cause a notice of noncompliance to be served on the operator whenever the operator fails to obey any order by the Director to:
   1. Apply the control techniques and institute the actions approved in his operations and reclamation plan;
   2. Comply with any required amendments to the operations or reclamation plan; or
   3. Comply with any other requirement of this chapter or any rules or regulations promulgated pursuant thereto which affect the health, safety and welfare of the Commonwealth.

B. A copy of the notice shall be delivered to the operator or served by certified mail addressed to the operator at the permanent address shown on the application for a permit. The notice shall specify in writing in what respects the operator has failed to obey the order of the Director and shall require the operator to comply with the order within a reasonable period of time as fixed by the Director, following service of the notice.

C. If the operator has not complied with the requirements set forth in the notice of noncompliance within the time limits fixed therein, the Director shall revoke the permit and declare the forfeiture of the entire bond, which, when collected, shall be deposited in the state treasury in a special reclamation fund to be used by the Director in performing reclamation under the provisions of this chapter. After completion of the reclamation and payment of all fees as required by this chapter, any additional funds from the forfeiture: (i) of the bond shall be returned to the corporate surety; or (ii) of the collateral security, certified check or cash that has been deposited in lieu of bond, shall be returned to the person who provided it originally or to the operator. Within 30 days of the issuance of any permit revocation or bond forfeiture made under this section, the operator may request a review pursuant to the provisions of Article 3 (§ 2.2-4018 et seq.) of the Administrative Process Act.

History.
1977, c. 312; 2012, cc. 803, 835.

Cross references.
As to forfeiture of payments made to the...
Minerals Reclamation Fund upon revocation of a permit under this section, see § 45.1-197.12.

The 2012 amendments.
   The 2012 amendments by cc. 803 and 835, cl. 46, are identical, and inserted subsection A to D designations; inserted “writing in” in the second sentence of subsection B; and substituted “Within 30 days of the issuance of any permit revocation or bond forfeiture made under this section, the operator may request a review pursuant to the provisions of Article 3 (§ 2.2-4018 et seq.) of the Administrative Process Act” for “If the operator files with the Director notice that he will appeal the order revoking the permit and declaring a forfeiture to the Board of Surface Mining Review, then the Director’s orders under this section shall be held in abeyance until the appeal is determined by the Board of Surface Mining Review” at the end of subsection D.

§ 45.1-186.2. Collection of debts.
   The amount by which the cost of reclamation exceeds the amount of the operator’s forfeited bond shall constitute a debt of the operator to the Commonwealth of Virginia. The Director is authorized to collect such debts, together with the cost of collection, through appropriate legal action or by declaring the forfeiture of other payments. Moneys collected through legal action, less the cost of collections, shall be deposited in the special reclamation fund created under § 45.1-186.1.

History.
1981, c. 76.

§ 45.1-187. Additional bond to cover amended estimate of land to be disturbed.
   If, during any operation, it is found that the operator’s estimate of the amount of disturbed land for which bond or other security has been posted for reclamation is less than the actual area disturbed, the Director shall order the operator to file additional bond or security sufficient to cover an amended estimate of land to be disturbed by such operation.

History.
1968, c. 734; 1974, c. 312.

Editor’s note.
This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.

§ 45.1-188. Interference with reclamation unlawful; other mining operations on land.
   It shall be unlawful for any owner or owners of surface rights or the owner or owners of mineral rights to interfere with the operator in the discharge of his obligations to the Commonwealth for the reclamation of lands disturbed by him. If the owner or owners of surface rights or the owner or owners of mineral rights desire to conduct other mining operations on lands disturbed by the operator furnishing bond hereunder, such owner or other person shall be in all respects subject to the provisions of this chapter and the Director shall then release an equivalent amount of bonds to the operator originally furnishing bond on the disturbed area.

History.
1968, c. 734; 1974, c. 312.

Editor’s note.
This section was amended by Acts 1973, c.
§ 45.1-188. PERMITS FOR OPERATIONS; RECLAMATION § 45.1-193.1

471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.


§ 45.1-191. Penalty for violation of chapter, etc.

Any violation of any provision of this chapter or of any order of the Director shall be a misdemeanor punishable by a maximum fine of $1,000 or a maximum of 1 year in jail, or both.

History. 1968, c. 734; 1974, c. 312.
Editor's note. This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.

§ 45.1-192. Assistance of federal, state and local agencies.

In approving plans of operation and in issuing rules and regulations for reclamation, the Director may avail himself and his Department of the advice, assistance and facilities of local soil and water conservation district supervisors or any other federal, state or local agency.

History. 1968, c. 734.
Editor's note. This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.


Cross references. For provisions authorizing the Director to petition for an injunction to prohibit further mining operations under certain circumstances, see § 45.1-193.1.

§ 45.1-193.1. Injunction prohibiting mining operation.

Whenever adverse ecological disruptions or the injurious effects thereof seriously threaten or endanger the health, safety, welfare and property rights of citizens of Virginia, and abatement is not feasible by the application of control techniques, the Director shall petition the appropriate circuit court for an injunction to prohibit further operations. Such injunction shall not relieve the operator from his duty to reclaim lands previously affected according to the terms and conditions of this permit.

History. 1977, c. 312.
§ 45.1-194. Appeals from decisions of the Department.

An appeal from any order of the Department shall be conducted in accordance with Article 3 (§ 2.2-4018 et seq.) of the Administrative Process Act. The appeal shall be taken within 30 days following the issuance of the order by forwarding to the Director by certified mail a notice of appeal designating the order from which the appeal is taken.

History.

The 2012 amendments.
The 2012 amendments by cc. 803 and 835, cl. 46, are identical, and rewrote the section.


Editor's note.
Former § 45.1-195, pertaining to the creation of Board of Surface Mining Review; membership; terms; vacancies; chairman; derived from Acts 1968, c. 734; 1974, c. 312; 1977, c. 312; 1979, c. 68; 1980, cc. 677, 728. Former § 45.1-196, pertaining to appeals from the Board of Surface Mining Review, derived from Acts 1968, c. 734; 1986, c. 615.

§ 45.1-197. Local standards and regulations; waiver of application of chapter; review for strict compliance with chapter.

Counties, cities and towns may establish standards and adopt regulations dealing with the same subject, provided, however, such standards and regulations shall not be below those adopted by the Director.

This chapter shall not be construed to repeal any local ordinance or regulation or charter provision now in effect in any county, city or town where the provisions are not less than the standards adopted by the Director. The Director may waive the application of this chapter if, in his opinion, a county, city or town in which mining operations are being conducted has enacted and is enforcing zoning ordinances dealing with the subject matter, prescribing standards and regulations not below those set forth in this chapter. If the Director waives the provisions hereof, the operator shall comply strictly with all the provisions of the ordinances of such counties, cities and towns in which his operations are located.

The Director may also waive the application of this chapter as to any mining or borrow pit operation which is conducted solely and exclusively for a state project and which is subject by contract to the control and supervision of a state agency, provided regulations satisfactory to the Director have been promulgated and are incorporated in any contract for such removal.

The county, city, town or state agency shall assure strict compliance with all the provisions of the ordinances, regulations or contracts and the Director shall from time to time review the ordinances, regulations or contracts and the enforcement programs to assure compliance with this chapter. If the Director determines that there is not strict compliance with this chapter, then he may rescind his waiver of the application of this chapter.

History.
1968, c. 734; 1974, c. 312; 1977, c. 312.

Editor's note.
This section was amended by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went

Editor's note. The repealed section was enacted by Acts 1973, c. 471. The 1973 act, which was made effective July 1, 1974, and provided that it should expire at midnight on that date unless earlier reenacted, was repealed by Acts 1974, c. 96, effective March 22, 1974, and therefore never went into effect.


ARTICLE 3.
ORPHANED LANDS.

§ 45.1-197.3. Definition.
For the purpose of this article, the term “orphaned lands” shall mean lands disturbed by surface mining of minerals other than coal operations which were not required by law to be reclaimed or which have not been reclaimed.

History. 1978, c. 634.

§ 45.1-197.4. Survey; priorities for reclamation.
The Director shall cause a survey to be conducted to determine the extent of the orphaned lands in this Commonwealth and shall establish priorities for the reclamation thereof.

History. 1978, c. 634.

§ 45.1-197.5. Agreements with owners or lessees; reclamation by Director.
The Director is authorized to enter into agreements with owners or lessees of orphaned lands when the owners agree to the reclamation of such lands by the Division to the extent and in the manner deemed appropriate or reasonable by the Director. In no event shall the Director return orphaned land to other than the minimum potential use thereof which obtained prior to the initiation of mining operations unless the landowner or owners, lessee or lessees, agree to bind himself or themselves to the payment of the additional cost upon such terms as the Director deems reasonable. In entering into such agreements, the Director shall be guided by the priorities for reclamation established by him, but in no event shall the Director enter into such agreement unless funds are immediately available for the performance of the agreement by the Director as hereinafter provided.

History. 1978, c. 634.
§ 45.1-197.6. Contracts for reclamation.

The Director is authorized to contract with any state agency, federal agency, or private contractor through the Division for the purpose of reclaiming orphaned lands pursuant to the agreements herein specified.

History.
1978, c. 634.

§ 45.1-197.7. Acceptance of federal funds, gifts, etc.

The Director is authorized to accept federal funds or gifts or grants from any source for the purposes of this article and is further authorized to acquire by gift or purchase, but not by the exercise of the power of eminent domain, such orphaned lands as in his judgment is in the public interest and to utilize any such funds, gifts or grants for the purposes of this article.

History.
1978, c. 634.

ARTICLE 4.
MINERALS RECLAMATION FUND.

§ 45.1-197.8. Creation of Fund.

There is hereby created in the State Treasurer’s office a special fund to be known as the Minerals Reclamation Fund, hereinafter referred to as the Fund, which shall be under the supervision of the Department. The Fund shall consist of all payments made into the Fund by operators in accordance with the provisions of this article.

History.
1978, c. 634.

§ 45.1-197.9. Membership in Fund; payments required.

Each operator who has had five years of satisfactory operation in the Commonwealth under Chapter 16 (§ 45.1-180 et seq.) of this title shall become a member of the Fund by making an initial payment to the Fund of fifty dollars for each acre estimated to be affected by mining operations during the next ensuing year. Thereafter, the member shall, within ten days following the anniversary date of each permit issued to the member, make a payment to the Fund of twelve dollars and fifty cents for each acre estimated to be affected by mining operations during the next ensuing year. Such payments shall continue to be made until the member has paid into the Fund a total of $500 for each acre, estimated to be affected under the permits issued to the member.

History.
1978, c. 634.
§ 45.1-197.10. Release of bonds and other securities.

When the size of the Fund shall have reached $400,000, the bonds and other securities previously posted, pursuant to § 45.1-183, by all members shall be released.

History.
1978, c. 634.

§ 45.1-197.11. Return of member payments.

Subject to the provisions of § 45.1-197.14, the Director shall return from the Fund to the member, the payments which the member has paid previously to the Fund, when the Director has determined that the member has completed satisfactory reclamation, in accordance with § 45.1-185. The payments returned shall be only those payments which the member has made for the acres which have been satisfactorily reclaimed. In lieu of a return, the member may request the Director to retain the payments in the Fund as payments for additional acres to be disturbed by the member’s operations.

History.
1978, c. 634.

§ 45.1-197.12. Revocation of permits; reclamation work.

If a permit which has been issued to a member is revoked pursuant to § 45.1-186.1, then the payments which the member has made to the Fund, with respect to the permit so revoked, shall be forfeited to the Fund. The Director shall use the payments so forfeited or as much thereof as shall be necessary, for the reclamation of the mining operation to which the permit had applied. In the event that the cost of reclamation exceeds the amount of the forfeited payments, the Director shall also use the proceeds from the member’s bond or other security also forfeited in conjunction with the revocation of the permit, in accordance with § 45.1-186.1, except that if all members’ bonds and other securities have been released pursuant to § 45.1-197.10 then the Director shall draw upon the Fund for the entire cost of reclamation.

History.
1978, c. 634.

§ 45.1-197.13. Collection of debt where cost of reclamation exceeds member’s forfeited payments, etc.

The amount by which the cost of reclamation exceeds the amount of a member’s forfeited payments and, if any, the member’s bond or other security also forfeited, shall constitute a debt of the member to the Commonwealth of Virginia. The Director is authorized to collect such debts together with the cost of collection, through appropriate legal action, or by declaring the forfeiture of other payments made by the member to the Fund. Moneys collected through legal action, less the costs of collection, shall be deposited in the Fund.

History.
1978, c. 634.

Whenever the size of the Fund shall decrease to less than $250,000 the Director shall suspend the return of payments pursuant to § 45.1-197.11 and shall assess all members an equal amount for each affected acre, for a total amount sufficient to raise the Fund to $250,000. In lieu of such an assessment all members shall at the request of the Director post bonds or other securities, within six months after the Director so notifies the members. Failure to post bond or other surety or to pay the required assessment shall result in the revocation of the permit of the member and the forfeiture of the member’s payments in accordance with § 45.1-197.12.

History.
1978, c. 634.

§ 45.1-197.15. Order of return of payments.

The return of payments to members shall be in the order in which the Director approves the completion of reclamation pursuant to § 45.1-185.

History.
1978, c. 634.

§ 45.1-197.16. Discontinuance of Fund.

In the event of the discontinuance of the Fund, any amounts remaining in the Fund shall be returned to the members in proportion to the amount that each member has paid.

History.
1978, c. 634.

§ 45.1-197.17. Construction of article; Fund used solely for reclamation.

Nothing in this article shall be construed as vesting in any member any right, title or interest in the Fund, or the disposition thereof. The Fund shall be used solely for reclamation of land pursuant to this chapter.

History.
1978, c. 634.

§ 45.1-197.18. Reclamation funding.

An amount equal to the average interest rate earned for all funds in the state treasury as applied to the Fund shall be paid annually to the Department to be used only for the reclamation of orphaned lands pursuant to Article 3 (§ 45.1-197.3 et seq.) of this chapter and is hereby allocated for such purposes.

History.
1978, c. 634; 1984, c. 590.
§ 45.1-225.1  Dams and refuse piles to be constructed, approved, etc., by qualified engineer; designs and other data to be submitted to the Director.

A. On and after July 1, 1974, new water or silt retaining dams, or a mine refuse pile, or the modification of existing mine water or silt or mine refuse retaining dams shall be designed and constructed by, or under the direction of, a qualified engineer, if such retaining dam:
   1. Is designed to impound water or silt to a height of five feet or more above the lowest natural ground level within the impounded area; and
   2. Has a storage volume of fifty acre-feet or more; or
   3. Is designed to impound water or silt to a height of twenty feet or more, regardless of storage volume.

B. Water and silt retaining dam or mine refuse piles, designs, construction specifications, and other related data, including final abandonment plans, shall be approved and certified by the qualified engineer specified in subsection A of this section, and by the licensed operator or his agent.

C. The designs, construction specifications, and other related data approved and certified in accordance with subsection B of this section shall be submitted for approval to the Director. If the submittal is approved by the Director, he shall notify the licensed operator in writing. If he disapproves, he shall notify the licensed operator with his written objections thereto and his required amendments. But in no event shall the Director fail to approve or disapprove the submittal within thirty days following the receipt thereof.


Cross references. As to definition of impounding structure, see § 10.1-604.

Michie's Jurisprudence. For related discussion, see 13A M.J. Mines and Minerals, § 2.

§ 45.1-225.2  Examination of dams and refuse piles; potentially hazardous conditions; plans to be submitted by licensed operators.

A. All water and silt retaining dams or mine refuse piles shall be examined daily for visible structural weakness, volume overload and other hazards by a qualified person designated by the licensed operator. When rising water and silt reaches eighty percent by volume of the safe design capacity of the dam, such examination shall be made more often as required by the Director or his
designated agent. Frequent examinations must be made during periods of rainfall that could create flooding conditions.

B. When a potentially hazardous condition exists, the operator shall initiate procedures to:
   1. Remove all persons from the area which may reasonably be expected to be affected by the potentially hazardous condition;
   2. Eliminate the potentially hazardous condition; and
   3. Notify the Director.

C. Records of the inspections required by subsection A of this section shall be kept and certified by the licensed operator or his agent. Such records shall be kept on the surface at the office or designated station of the mine.

D. The licensed operator of each mineral mine on which a water and silt retaining dam is located shall adopt a plan for carrying out the requirements of subsections A and B of this section. The plan shall be submitted for approval to the Director on or before October 31, 1974. The plan shall include:
   1. A schedule and procedures for inspection of the retaining dam by a qualified person;
   2. Procedures for evaluating potentially hazardous conditions;
   3. Procedures for removing all persons from the area which may reasonably be expected to be affected by the potentially hazardous conditions;
   4. Procedures for eliminating the potentially hazardous conditions;
   5. Procedures for notifying the Director; and
   6. Any additional information which may be required by the Director.

E. Before making any changes or modifications in the plan approved in accordance with subsection D of this section, the licensed operator shall obtain approval of such changes or modifications from the Director.

History.

§ 45.1-225.3. Definitions.

For the purpose of this chapter, the term
“Impound water” means to impound water for use in carrying out any part of the process necessary in the production or preparation of minerals.
“Refuse” means waste material resulting from a mineral mining operation.
“Silt” means fine particles resulting from a mineral mining operation, suspended in or deposited by water.
“Water” means water used in mining operations.

History.
1997, c. 390.
VIRGINIA RECLAMATION REGULATIONS
FOR MINERAL MINING

VIRGINIA ADMINISTRATIVE CODE

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TITLE 4
CONSERVATION AND NATURAL RESOURCES
V.A.C. Agency No. 25
Department of Mines, Minerals and Energy

CHAPTER 31
RECLAMATION REGULATIONS FOR MINERAL MINING

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4 VAC 25-31-480. Diversions.
4 VAC 25-31-520. Revegetation.
4 VAC 25-31-540. Trees and shrubs.
4 VAC 25-31-550. (Repealed.)

Part V. Orders.

4 VAC 25-31-560. Informal review.
4 VAC 25-31-570. Formal review.

PART I

GENERAL PROVISIONS


The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:
“Acre-foot” means a unit of volume equal to 43,560 cubic feet or 325,853 gallons. One acre-foot of water is equivalent to one acre covered by water one foot deep.

“Berm” means a stable ridge of material used in reclamation for the control of sound and surface water, safety, aesthetics, or such other purpose as may be applicable.

“Critical areas” means problem areas such as those with steep slopes, easily erodible material, hostile growing conditions, concentration of drainage or other situations where revegetation or stabilization will be potentially difficult.

“Dam break inundation zone” means the area downstream of a dam that would be inundated or otherwise directly affected by the failure of a dam.

“Department” means the Department of Mines, Minerals and Energy.

“Director” means the Director of the Department of Mines, Minerals and Energy or his designee.

“Division” means the Division of Mineral Mining.

“Fifty-year storm” means the storm magnitude expected to be equaled or exceeded on the average of once in 50 years. It may also be expressed as a probability that there is a 2.0% chance that the storm magnitude may be equaled or exceeded in any given year. A 50-year, 24-hour storm occurs when the total 50-year storm rainfall occurs in a 24-hour period.

“Inert waste” means brick, concrete block, broken concrete, and uncontaminated minerals or soil.

“Intermittent stream” means a stream that contains flowing water for extended periods during a year, but does not carry flows at all times.

“Internal service roads” means roads that are to be used for internal movement of raw materials, soil, overburden, finished, or in-process materials within the permitted area, some of which may be temporary.

“Natural drainageway” means any natural or existing channel, stream bed, or watercourse that carries surface or ground water.

“One hundred-year storm” means the storm magnitude expected to be equaled or exceeded on the average of once in 100 years. It may also be expressed as a probability that there is a 1.0% chance that the storm magnitude may be equaled or exceeded in any given year. A 100-year, 24-hour storm occurs when the total 100-year storm rainfall occurs in a 24-hour period.

“On-site generated mine waste” means the following items generated by mineral mining or processing activities taking place on the permitted mine site:

- Drill steel
- Crusher liners
- Conveyor belting
- Steel cable
- Screen cloth
- Punch plate
- Tree stumps/land clearing debris
- Large off-road tires
- Scrap wood or metal
- Steel reinforced air hoses
- Broken concrete or block
- V-belts

“Perennial stream” means a well-defined channel that contains water year round during a year of normal rainfall. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.

“Permitted area” means the area within the defined boundary shown on the application map including all disturbed land area, and areas used for access roads and other mining-related activities.
"Principal access roads" means roads that are well-defined roads leading from scales, sales offices, or loading points to a public road.

"Probable maximum flood (PMF)" means the flood that might be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the region. The PMF is derived from the current probable maximum precipitation (PMP) available from the National Weather Service, National Oceanic and Atmospheric Administration. In some cases local topography or meteorological conditions will cause changes from the generalized PMP values; therefore, it is advisable to contact local, state, or federal agencies to obtain the prevailing practice in specific cases.

"Qualified person" means a person who is suited by training or experience for a given purpose or task.

"Regrade" or "grade" means to change the contour of any surface.

"Riparian buffer" means an area of trees, shrubs, or other vegetation that is managed to maintain the integrity of the stream channel and reduce the effects of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals.

"Sediment" means undissolved organic or inorganic material transported or deposited by water.

"Sediment basin" means a basin created by the construction of a barrier, embankment, or dam across a drainageway or by excavation for the purpose of removing sediment from the water.

"Spillway design flood (SDF)" means the largest flood that needs be considered in the evaluation of the performance for a given project. The impounding structure shall perform so as to safely pass the appropriate SDF. Where a range of SDF is indicated, the magnitude that most closely relates to the involved risk should be selected.

"Stabilize" means any method used to prevent movement of soil, spoil piles, or areas of disturbed earth. This includes increasing bearing capacity, increasing shear strength, draining, compacting, rip-rapping, vegetating or other approved method.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"Ten-year storm" means the storm magnitude expected to be equaled or exceeded on the average of once in 10 years. It may also be expressed as a probability that there is a 10% chance that the storm magnitude may be equaled or exceeded in any given year. A 10-year 24-hour storm occurs when the total 10-year storm rainfall amount occurs in a 24-hour period.

"Top soil" means the surface layer and its underlying materials that have properties capable of producing and sustaining vegetation.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


This chapter establishes general and specific rules for mining permits, bonds, operations and reclamation procedures, roads, revegetation, and other matters related to mineral mining.

The permittee shall comply fully with the requirements of Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia and this regulation and shall further ensure compliance by all employees, contractors, or other persons performing mining or reclamation activities.

4 VAC 25-31-40. Modifications.

The division may approve modifications or amendments to any drainage, reclamation and operation plan required under Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia and provisions of these regulations. All modifications or amendments shall be valid only when approved in writing.

4 VAC 25-31-50. (Repealed.)

Historical Notes

4 VAC 25-31-60. Other governmental agencies and laws.

Any mineral mining permit issued shall not supersede or otherwise affect or prevent the enforcement of other laws and regulations of federal, state, or local governments.

4 VAC 25-31-70. Exemptions.

A. These regulations shall not apply to:
   1. Excavation or grading when conducted solely to aid on-site farming or construction;
   2. Mining of coal, unless the coal is mined incidental to the mining of minerals;
   3. Searching, prospecting, exploring or investigating for minerals by drilling; and
   4. Excavation or grading when conducted by an agency or governmental unit of the Commonwealth, local government, or the federal government using government employees.
B. The surface extraction of minerals shall not constitute mineral mining unless:
   1. The mineral is extracted for its unique or intrinsic characteristics or:
      2. The mineral requires processing prior to its intended use.

C. When considering whether an operation is exempt, the director shall consider the length of time or duration of the activity, whether it is a one-time activity, and whether all necessary permits and approvals are in place before the activity begins.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

PART II
PERMIT STANDARDS

ARTICLE 1
PERMITS


Contiguous areas mined by a single operator shall be covered under one permit; however, the director may, at his discretion, combine noncontiguous areas into a single permit where such areas are close to each other and are part of the same operation.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


Prior to approval of a permit application, all maps and plans shall be reviewed at the proposed mining site with the inspector.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-100. Mineral mining permits.

Permits shall be renewed annually, in a manner acceptable to the director, to continue to remain in effect. Paper filings shall be considered acceptable.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes
4 VAC 25-31-110. Permit application.

Application for a mineral mining permit shall be made in a form prescribed by the director and shall be certified by the applicant or his authorized representative. Copies of the application shall be submitted to the division in a manner acceptable to the director. Paper filings shall be considered acceptable.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-120. Permit fee and bond.

A. The following permit fees shall be submitted upon receipt of a billing notice from the director and before the permit is issued:
   1. A fee of $31 per acre for the total permitted acres shall be submitted for the initial permit application.
   2. A fee of $16 per acre for the land permitted by the total operation shall be paid to transfer the permit when one operator succeeds another on an uncompleted operation.
B. All fees shall be in the form of cash, check, money order, or other form of payment acceptable to the director.
C. A bond is required as set forth in Part III of this regulation. Bonding shall be provided once the permit application is deemed complete.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-130. Mineral mining plans.

Mineral mining plans shall be attached to the application and consist of the following:
   1. The operation plan shall include a description of the proposed method of mining and processing; the location of top soil storage areas; overburden, refuse and waste disposal areas; stockpiles, equipment storage, and maintenance areas; cut and fill slopes; and roadways. The operation plan shall also include all related design and construction data. The method of operation shall provide for the conducting of reclamation simultaneously where practicable with the mining operation. For the impoundments that meet the criteria of § 45.1-225.1.A of the Code of Virginia, plans shall be provided as required under 4 VAC 25-31-180 and 4 VAC 25-31-500.
   2. The drainage plan shall consist of a description of the drainage system to be constructed before, during and after mining, a map or overlay showing the natural drainage system, and all sediment and drainage control structures to be installed along with all related design and construction data.
   3. The reclamation plan shall include a statement of the planned land use to which the disturbed land will be returned through reclamation, the proposed actions to assure suitable reclamation, and a time schedule for reclamation. The method of grading, removal of metal, lumber, and debris,
including processing equipment, buildings, and other equipment relative to
the mining operation and revegetation of the disturbed area shall be specified.

4. Adequate maps, plans and cross sections, and construction specifications
shall be submitted to demonstrate compliance with the performance
standards of Part IV (4 VAC 25-31-330 et seq.) of this chapter and Chapter 16
(§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia. Designs, unless
otherwise specified, shall be prepared by a qualified person, using accepted
engineering design standards and specifications.

5. A copy of the Virginia Department of Transportation land use permit
for roads that connect to public roads.

6. If mining below the water table is to take place, the following conditions
apply:
a. The application shall contain a formal assessment of the potential for
impact on the overall hydrologic balance from the proposed operations to be
conducted within the permitted area.

b. A plan for the minimization of adverse effects on water quality or
quantity shall be prepared based on the assessment in subdivision 6.a of this
section and included in the application.

c. Permanent lakes or ponds created by mining shall be equal to or
greater than four feet deep or otherwise constructed in a manner acceptable to
the director.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of
Virginia.

Historical Notes
Derived from Virginia Register Volume 19, Is-

4 VAC 25-31-140. Marking of permit boundaries.

A. The permit boundary of the mine shall be clearly marked with identifi-
able markings when mine related land disturbing activities are within 100 feet
of the permit boundary.

B. This section is not applicable to lands disturbed prior to September 11,
2003.

C. Maintenance of permit boundary markers is not required after comple-
tion of construction, completion of final disturbances, or completion of final
reclamation unless the area is being redisturbed by mining.

D. Separate boundary markings are not required if clear, readily identifi-
able features, such as streams, permanent roads, or permanent power lines
coincide with the permit boundary.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of
Virginia.

Historical Notes
Derived from Virginia Register Volume 19, Is-

4 VAC 25-31-150. Maps.

A. Maps shall be supplied as described in §§ 45.1-181 and 45.1-182.1 of the
Code of Virginia and in this chapter that show the total area to be permitted
and the area to be affected in the next ensuing year (with acreage calculated).
B. Preparation of maps.
   1. All application, renewal, and completion maps shall be prepared and certified under the direction of a professional engineer, licensed land surveyor, licensed geologist, issued by a standard mapping service, or prepared in such a manner as to be acceptable to the director.
   2. If maps are not prepared by the applicant, the certification of the maps shall read as follows: “I hereby certify that this map is correct and shows to the best of my knowledge and belief, all the information required by the mineral mining laws and regulations of the DMME.”
   3. The applicant shall submit a general location map showing the location of the mine, such as a county highway map or equivalent, in the initial application.
   4. Sensitive features within 500 feet of the permit boundary including state waters, cemeteries, oil and gas wells, underground mine workings, public utilities and utility lines, buildings, roads, schools, churches, and occupied dwellings shall be shown.
   5. All properties, and their owners, within 1,000 feet of the permit boundary shall be identified in the initial application.
   6. Wetlands that have been previously delineated shall be shown within the permit boundary.
   7. Riparian buffers that have been previously delineated shall be shown within the permit boundary.

C. Map code and legend.
   1. A color code as prescribed by the director shall be used in preparing the map.
   2. Graphic symbols may be used to represent the different areas instead of a color-coded map.
   3. The map shall include a legend that shows the graphic symbol or color code and the acreage for each of the different areas.

**Statutory Authority**
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

**Historical Notes**

4 VAC 25-31-160. Legal right.

A. A statement of the source of the legal right of the applicant to enter and conduct operations on the land proposed to be covered by the permit as noted in § 45.1-181 of the Code of Virginia shall be submitted to the division. In addition, the applicant shall submit proof of right of entry, which shall consist of a copy of the lease or deed, or names of parties to the lease or deed, date of execution, and recording information.

B. On the permit application, the applicant shall disclose any type of mining permit, revocations, security deposited in lieu of bond that has been revoked or forfeited, and bond forfeitures in Virginia or any other state with which he or any individual, corporation, trust, partnership, association, or other legal entity with which he has or has had control or common control.

**Statutory Authority**
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

**Historical Notes**
4 VAC 25-31-170. Permit application notifications.

A. The following shall be made with a new permit application:
   1. Notification to property owners within 1,000 feet of the permit boundary by certified mail. A record shall be kept of:
      a. The names and addresses of those notified, and
      b. The certified mail return receipts used for the notification.
   2. A statement as required by § 45.1-184.1 of the Code of Virginia to property owners that requires land owners within 1,000 feet of the permit boundary to be notified that the operator is seeking a surface mining and reclamation permit from the Department of Mines, Minerals and Energy. The statement shall also include:
      a. Company name;
      b. Date;
      c. Location;
      d. Distance and direction of nearest town or other easily identified landmark;
      e. City or county;
      f. Tax map identification number; and
      g. Requirements for (i) regrading; (ii) revegetation; and (iii) erosion controls of mineral mine sites.
      h. A notice that informs property owners that they have 10 days from receipt of the permit notification to specify written objections or request a hearing. This request shall be in writing and shall be sent to the Department of Mines, Minerals and Energy, Division of Mineral Mining.

B. Applicants will provide a copy of the permit notification to the division at the time they are mailed to the neighboring landowners.

C. A statement, with certified mail receipt, certifying that the chief administrative official of the local political subdivision has been notified.

D. Notification shall be made to any public utilities on or within 500 feet of the permitted area. The notification shall consist of the following:
   1. The name of the party issuing the notice;
   2. The applicant name, address, and phone number; and
   3. The name and address of the party receiving the notice and the information noted in subdivision A 2 of this section.

E. No permit will be issued until at least 15 days after receipt of the application by the division. If all persons required to receive notice have issued a statement of no objection, the permit may be issued in less than 15 days.

F. Copies of all permit notifications and statements required in subsections A through D of this section shall be supplied to the division with the application.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-180. Impoundments.

The design data and construction plans and specifications for impoundments meeting the criteria set forth in Chapter 18.1 (§ 45.1-225.1 et seq.) of Title 45.1 of the Code of Virginia shall be submitted to the director prior to initiation of
construction activities. Such a plan shall be certified as prepared by, or under the supervision of, a registered professional engineer and shall include:

1. Design and construction specifications;
2. Examination and monitoring;
3. Emergency procedures; and
4. Closure and abandonment plans.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-190. Availability of permits.

Mineral mining permits, a copy of the permit application, and a copy of the approved mineral mining plan shall be kept on-site while mining is underway.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


Any operator engaging in mining and disturbing less than a total of one acre of land and removing less than a total of 500 tons of minerals, is exempt from all mining permit fees, renewal fees and bonding requirements in this chapter. The mining operator shall submit an application for a permit, a sketch of the mining site, and an operations plan, which shall be adhered to in accordance with §§ 45.1-181 and 45.1-182.1 of the Code of Virginia.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

ARTICLE 2

PERMIT RENEWAL AND SURETY ADJUSTMENTS


A. If a permitted mineral mine operator wishes to continue operations, the mineral mining permit shall be renewed each year within 10 days of the anniversary date. If the time requirements set forth herein are not met, the permit shall expire 10 days following the anniversary date.

B. A renewal fee in the amount of $16 per acre for previous acres disturbed plus estimated additional acres to be disturbed in the next 12 months shall accompany the permit renewal submitted to the director.

C. The permit renewal shall be submitted on a form prescribed by the director. The renewal shall be signed by the applicant or his legal representative. The permit renewal and maps must be received by the anniversary date and meet the requirements in 4 VAC 25-31-100 through 4 VAC 25-31-220.

D. If in a given year there are no changes to the map required in 4 VAC 25-31-150, the operator may submit a certification instead of the map for the
year. The certification shall read as follows: “I, the undersigned, hereby certify that no changes have been made in the different areas or in other map features since the last annual permit renewal or modification.”

E. If at renewal time, bond or other surety is less than the required coverage, the director will notify the operator in writing of the amount required. The operator shall submit the required bond according to the requirements in 4 VAC 25-31-220 through 4 VAC 25-31-270 before the area is disturbed.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

PART III
BONDING

4 VAC 25-31-220. Requirements for bonding of mineral mines.

A. Once the permit application is deemed complete, the applicant shall submit a bond or bonds on a form meeting the requirements in 4 VAC 25-31-220 through 4 VAC 25-31-270, made payable to the department and conditioned upon the satisfactory performance of all the requirements of this chapter, the approved permit, and Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia, including completion of the reclamation plan so that the land will be capable of supporting the approved post-mining land use.

B. The bond or bonds shall cover the entire area presently disturbed by mining plus the estimated number of acres to be disturbed in the upcoming year.

C. As additional areas outside the bonded acreage are to be disturbed to facilitate the mining operation, the permittee shall file a bond or bonds to cover the acreage with the division.

D. Bond shall be posted and accepted by the division prior to disturbing an area for mining-related activity.

E. Permitted operators shall certify annually with the permit renewal the type, current insurer or bank, and the amount of all reclamation bonds.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


A. The bond liability shall be for the duration of the mineral mining operation and for the period following reclamation, which is necessary to demonstrate the success of the final reclamation.

B. In lieu of the requirements of 4 VAC 25-31-240 through 4 VAC 25-31-270, a permittee accruing five years of satisfactory operation under Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia shall be required to enter the Minerals Reclamation Fund as established in Article 4 (§ 45.1-197.8 et seq.) of Chapter 16 of Title 45.1 of the Code of Virginia and 4 VAC 25-31-320. All performance bonds will be released upon acceptance in the Minerals Reclamation Fund and payment of required fees.
4 VAC 25-31-240. Bond amount.

A. The amount of bond shall be $1,000 per acre of disturbed land.
B. The minimum bond for a mineral mining permit shall be $1,000, except for restricted permits and Minerals Reclamation Fund participants.

4 VAC 25-31-250. General terms and conditions of bond.

A. The bond shall be of the form and amount as specified by the division.
B. The performance bond shall be payable to the department.
C. The performance bond shall be conditioned upon satisfactory performance of all the requirements of this chapter, the approved permit, and Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia, including completion of the reclamation plan so that the land will be capable of supporting the approved post-mining land use.


The bond shall be submitted in the form of cash, check, certificate of deposit, insurance surety bond, or irrevocable letter of credit.

A. Certificates of deposit.
   1. Certificates of deposit must be made payable to the Treasurer of Virginia, Division of Mineral Mining.
   2. The amount of the certificate of deposit must include the maximum early withdrawal penalty rounded up to the next higher hundred dollars.
   3. The original certificate of deposit shall be submitted to the division and held by the division throughout the bond liability period.
   4. Certificates of deposit must be automatically renewable.
   5. The certificate of deposit must be from a bank located in the Commonwealth of Virginia or approved as an allowable bank depository by the Virginia Department of Treasury.
   6. Interest accrued on certificates of deposit may be deposited to the permittee's individual account and is free of encumbrance by bond liability.
   7. In the event of forfeiture of a certificate of deposit, the face value of the deposit plus any accrued interest that has been rolled back into the certificate principal will be subject to bond liability and expenditure in the performance of the reclamation obligation.
B. Surety bonds.
   1. All bonds shall be in a form acceptable to the director. Bonds shall be executed by the permittee, and a corporate surety and agent licensed to do business in the Commonwealth.
   2. Surety bonds shall not be canceled during their term except that surety bond coverage for lands not disturbed may be canceled with the prior consent
of the division. The division shall advise the surety, within 30 days after receipt of a notice to cancel bond, whether the bond may be canceled on an undisturbed area.

C. Irrevocable letter of credit.

1. The director may accept a letter of credit on certain designated funds issued by a financial institution authorized to do business in the Commonwealth. The letter of credit shall be irrevocable and unconditional, shall be payable to the division on demand, and shall afford to the division protection equivalent to a corporate surety bond. The issuer of the letter of credit shall give prompt notice to the permittee and the division of any notice received or action filed alleging the insolvency or bankruptcy of the issuer, or alleging any violations of regulatory requirements that could result in the suspension or revocation of the issuer's charter or license to do business. In the event the issuer becomes unable to fulfill its obligations under the letter of credit for any reason, the issuer shall immediately notify the permittee and the division. Upon the incapacity of an issuer by reason of bankruptcy, insolvency, or suspension or revocation of its charter or license, the permittee shall be deemed to be without proper performance bond coverage and shall promptly notify the division, and the division shall then issue a notice to the permittee specifying a reasonable period, which shall not exceed 90 days, to replace bond coverage. If an adequate bond is not posted by the end of the period allowed, the permittee shall cease mineral extraction and mineral processing operations and shall immediately begin to conduct reclamation operations in accordance with the reclamation plan. Mineral extraction and mineral processing operations shall not resume until the division has determined that an acceptable bond has been posted. If an acceptable bond has not been posted by the end of the period allowed, the division may suspend the permit until acceptable bond is posted.

2. The letter of credit shall be provided on the form and in the format established by the director.

3. Nothing contained in this section shall relieve the permittee of responsibility under the permit or the issuer of liability on the letter of credit.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-270. Replacement of bonds.

A. The division may allow a permittee to replace existing bonds with other bonds that provide equivalent coverage.

B. The division shall not release existing performance bonds until the permittee has submitted and the division has approved acceptable replacement performance bonds. Replacement of a performance bond pursuant to this section shall not constitute a release of bond.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

The division may release all or part of the bond for the entire permit area or a portion of the permit area if the division is satisfied that all reclamation covered by the bond or portion thereof has been accomplished in accordance with this chapter, the approved permit, and Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia, including completion of the reclamation plan so that the land will be capable of supporting the approved post-mining land use.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


If the post-mining use is to be intensive agriculture, then planting and harvesting of a normal crop yield is required to meet the regulatory requirements for full or partial bond release. A normal yield for a particular crop is equal to the five-year average for the county. If crop yield data is unavailable, then other methods to determine suitability for bond release may be utilized as acceptable to the director. The use of grass, water bars, or diversion strips and natural vegetative drainage control may be required in the initial planting year as specified by the director.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-300. Inspections for adequacy of vegetation and bond release.

A. Final inspection for bond release shall be made no sooner than two growing seasons after the last seeding.

B. Final inspection for bond release shall require:
   1. No noncritical areas larger than one-half acre shall be allowed to exist with less than 75% ground cover. Vegetation shall exhibit growth characteristics for long-term survival.
   2. Seeded portions of critical areas shall have adequate vegetative cover so the area is completely stabilized.
   3. Bond release inspections for industrial, residential, or commercial post-mining use shall ensure that:
      a. All areas not disturbed by implementation of the post-mining use are reclaimed and satisfactorily stabilized.
      b. All areas associated with construction of buildings or residential dwellings for post-mining use are covered by appropriate plans approved by the local governing body, i.e., erosion and sediment control plans, building permits, and development plans.
      c. All areas not covered by such approved local government plans shall be reclaimed and stabilized in accordance with subdivisions 1 and 2 of this subsection prior to release of bond.

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4. Bond release inspections for other post-mining uses will ensure that all areas not directly used by the post-mining use are stabilized in accordance with subdivisions 1 and 2 of this subsection and that the post-mining use is implemented.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-310. Bond forfeiture.

A. If the permittee refuses or is unable to comply with an order by the director under § 45.1-186.1 of the Code of Virginia, fails to comply with the terms of the permit, or defaults on the conditions under which the bond was accepted, the division shall take the following action to revoke the permit and forfeit the bond or bonds for the permit area or a portion of the permit area:
1. Send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond informing them of the decision to revoke the permit and forfeit all or part of the bond, and the reasons for this action.
2. Advise the permittee and surety of the conditions under which forfeiture may be avoided. Such conditions may include:
   a. Agreement by the permittee or another party to perform reclamation operations in accordance with a compliance schedule acceptable to the division, which meets the conditions of the permit and the reclamation plan, and demonstrates that such party has the ability to satisfy the conditions; or
   b. The division may allow a surety to complete the reclamation plan if the surety can demonstrate an ability to complete the reclamation in accordance with the approved reclamation plan. Except where the division may approve partial release, no surety liability shall be released until successful completion of all reclamation under the terms of the permit.
B. In the event forfeiture of the bond is required, the division shall:
1. Proceed to collect the forfeited amount as provided by Virginia law for the collection of defaulted bonds or other debts if actions to avoid forfeiture have not been taken, if any rights of appeal have not been exercised within a time established by the division, or if such appeal is unsuccessful.
2. Use funds collected from bond forfeiture to complete the reclamation plan on the permit area.
C. Upon default the division may cause the forfeiture of any and all bonds deposited to complete reclamation for which the bonds were posted. Bond liability shall extend to the entire permit area under conditions of forfeiture.
D. Reclamation costs in excess of the forfeited bond amount will constitute a debt of the operator to the Commonwealth of Virginia and shall be collected in accordance with § 45.1-186.2 of the Code of Virginia.
E. In the event the amount of performance bond forfeited was more than the amount necessary to complete reclamation, the unused funds shall be returned by the division to the party from whom they were collected.
F. Appeal of bond forfeiture decisions may be made by the operator by providing notice of appeal to the director in accordance with Article 3 (§ 2.2-4018 et seq.) of the Administrative Process Act. If the operator files a notice of appeal, then the director’s orders revoking the permit and declaring forfeiture shall be held in abeyance until the appeal is determined.

A. Each operator who has had five years of satisfactory operation in the Commonwealth under Chapter 16 (§ 45.1-180 et seq.) of Title 45.1 of the Code of Virginia shall become a member of the fund by making an initial payment to the fund of $50 for each acre currently disturbed and each acre estimated to be affected by mining operations during the next year. Thereafter the member shall make an annual payment of $12.50 for each acre currently disturbed plus each acre estimated to be affected during the next ensuing year. No annual Minerals Reclamation Fund deposits will be collected from members where the permit Minerals Reclamation Fund deposits divided by the number of bonded acres in the next ensuing year is equal to or greater than $500.

B. Entry into the Minerals Reclamation Fund shall be mandatory for all eligible permittees.

C. Operator deposits into the Minerals Reclamation Fund shall be released or retained under the following conditions:

1. When the operation and reclamation are complete and the reclaimed area is suitable for bond release, Minerals Reclamation Fund deposits for the reclaimed area shall be returned to the operator.

2. When the mining permit is transferred to another permittee and division approval is granted, Minerals Reclamation Fund deposits for the permit may be returned to the transferring permittee.

3. When a mining permit is completely relinquished to another operator, other than in a permit transfer, all of the Minerals Reclamation Fund deposits for the permit shall be returned to the relinquishing operator upon division approval of the relinquishment.

4. After bond release applications are approved by the division, Minerals Reclamation Fund deposits for the permit shall be held or retained according to the following formulas:

   a. If the permit Minerals Reclamation Fund balance divided by the number of acres remaining under bond is equal to or greater than $500, Minerals Reclamation Fund deposits for the permit will be released so that the remaining deposits equal $500 per acre for the acres remaining under bond.

      Example: 50 acres permitted; 10 acres bonded; 2 acres requested for release; Minerals Reclamation Fund deposits = $4,000;
      Minerals Reclamation Fund balance ÷ remaining bonded acres = $500;
      $4,000 ÷ (10-2) acres = $500.

   b. If the permit Minerals Reclamation Fund balance divided by the number of acres remaining under bond is less than $500, the bond release amount will be determined by dividing the permit Minerals Reclamation Fund deposit by the number of bonded acres including the acres to be released and then multiplying by the number of acres to be released.

      Example: 50 acres permitted; 10 acres bonded; 2 acres requested for release; Minerals Reclamation Fund deposits = $3,000;
Minerals Reclamation Fund balance ÷ total bonded acres = Release amount $ per acre;

$3,000 ÷ 10 acres = $300 per acre;

Release amount = $300 per acre x 2 acres = $600.

D. Moneys available in the Minerals Reclamation Fund may be less than the total of all operator deposits due to expenditures for bond forfeiture as required by § 45.1-197.12 of the Code of Virginia. Minerals Reclamation Fund refunds are subject to availability of moneys in the Minerals Reclamation Fund and shall be suspended if the fund decreases below $250,000. Payments to the fund are then proportionately assessed until the fund returns to a minimum, $250,000 or bond or other securities are posted as required by the director in accordance with § 45.1-197.14 of the Code of Virginia.

E. Minerals Reclamation Fund deposits will be transferred to the successor operator when a permit transfer occurs due to a change in organization status or restructuring that does not involve a complete change of ownership.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

PART IV
PERFORMANCE STANDARDS

4 VAC 25-31-330. Protected structures and sensitive features.

Mining activities shall be conducted in a manner that protects state waters, cemeteries, oil and gas wells, underground mine workings, public utilities and utility lines, buildings, roads, schools, churches, and occupied dwellings.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


A permanent sign shall be installed on the mining site adjacent to the principal access road and shall be visible and legible to access road traffic. The name of the permittee and the permit number shall be on the marker.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


A. Internal service roads and principal access roads shall be planned to minimize the impact of traffic, dust, and vehicle noise on developed areas outside the mining site.

B. Construction standards.
1. The integrity of drainageways shall be maintained. If natural drainageways are altered or relocated during construction, adjoining landowners shall be protected from damage resulting from construction.

2. Drainage structures shall be required in order to cross a stream channel. Such structures shall be constructed with consideration for surrounding drainage acreage and culvert size, and slope so as not to restrict the flow of the stream, i.e., the bridge or culverts shall be of adequate size to permit stream flow throughout the seasonal periods during the life of the mine permit. Temporary stream crossings for pioneer roads shall be for infrequent use, stable, only used in low flow times, and shall not contribute to sedimentation off-site.

3. Roads shall be located away from streams wherever possible.

4. Road surfaces and ditches shall be stabilized. Side slopes shall be constructed in a stable manner to minimize erosion and sedimentation.

5. Ditches shall be constructed where necessary, with consideration for surrounding drainage acreage and slope and shall have sufficient capacity to control surface run-off.

6. Culverts shall be installed in accordance with the following standards:
   a. Relief culverts shall be installed at intervals to prevent overloading of ditches.
   b. Culverts shall be placed on a minimum grade to ensure free drainage and be covered by compacted fill as specified by the manufacturer.
   c. The inlet end shall be protected by a headwall of a suitable material such as a concrete retaining wall, sand bags, rock riprap, or other approved material.
   d. The outlet end shall discharge onto an apron of rock riprap or other approved material. Where practical, the outlet end shall be placed below the toe of the fill. At no time should run-off be allowed to flow over an unprotected fill slope.
   e. All culverts shall have the capacity to carry storm run-off and shall be properly maintained.

7. Sediment control shall be provided for roads to minimize sediment that leaves the disturbed area.

8. Dust from roads shall be adequately controlled.

9. Roads shall be surfaced and maintained to prevent the depositing of mud and debris on public roads.

10. Roads shall not be surfaced with any acid producing material or any material that will introduce a high concentration of suspended solids into surface drainage.

C. Maintenance is required to ensure the proper functioning of the road and drainage system. Maintenance of the road system shall consist of inspecting, repairing and cleaning of roadways, ditches, and culverts as necessary. Particular attention shall be given to removing debris from culvert inlets.

D. When a road is abandoned, steps shall be taken to minimize erosion and establish the post-mining use in accordance with the reclamation plan.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes
4 VAC 25-31-360. Operation and reclamation.

A. Mining operations shall be conducted to minimize adverse effects on the environment and facilitate integration of reclamation with mining operations according to the special requirements of individual mineral types. Mining shall be conducted to minimize the acreage that is disturbed and reclamation shall be conducted simultaneously with mining to the extent feasible.

B. Open pit mining of unconsolidated material shall be performed in such a way that extraction and reclamation are conducted simultaneously.

C. Mining activities shall be conducted so that the impact on water quality and quantity are minimized. Mining below the water table shall be done in accordance with the mining plan under 4 VAC 25-31-130.

D. Permanent lakes or ponds created by mining shall be equal to or greater than four feet deep, or otherwise constructed in a manner acceptable to the director.

E. Excavation shall be done in such a manner as to keep storm drainage flowing toward sediment control structures. Diversions shall be used to minimize storm run-off over disturbed areas.

F. The mining operation shall be planned to enhance the appearance to the public during mining and to achieve simultaneous and final reclamation.

G. At the completion of mining, all entrances to underground mines shall be closed or secured and the surface area reclaimed in accordance with the mineral mining plan.

H. Reclamation shall be completed to allow the post-mining land use to be implemented. After reclamation, the post mining land use shall be achievable and compatible with surrounding land use. All necessary permits and approvals for the post-mining land use shall be obtained prior to implementation.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-370. Slopes.

A. The grade of completed slopes shall be as described in the mineral mining plan. Long uninterrupted slopes shall be provided with drainage control structures, such as terraces, berms, and waterways, to minimize erosion due to surface run-off.

B. Slopes shall be stabilized, protected with a permanent vegetative or riprap covering, and shall not be eroded.

C. Constructed cut or fill slopes shall not extend closer than 25 feet to any property boundary without the written permission of the adjoining property owner and the approval of the director.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-380. Treatment of acid material.

All acid material encountered during the mining operation shall be properly controlled to prevent adverse impacts on surface or groundwater quality. Upon
completion of mining, acid materials shall be covered with a material capable of shielding them and supporting plant cover in accordance with the approved reclamation plan. Unless otherwise specified by the director, the minimum cover shall be four feet in depth.

Statutory Authority  
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes  

4 VAC 25-31-390. Handling of spoil piles and stockpiles of minerals.

A. All spoil piles will be graded in accordance with the mineral mining plan in such a manner as to minimize sediment run-off.

B. Stockpiles of minerals shall be removed to ground level and the area shall be scarified and planted in accordance with the approved mineral mining plan. The director shall allow a reasonable time for sale of stockpiles.

Statutory Authority  
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes  

4 VAC 25-31-400. Overburden, refuse, spoil and waste fills.

A. Overburden, refuse, spoil and waste disposal fills with the capability to impound water, sediment or slurried tailings, slimes or refuse in a liquid, or semi-liquid state, shall be designed and constructed in accordance with 4 VAC 25-31-500.

B. Overburden, refuse, spoil and waste disposal fills that do not have the capability to impound water or other liquid or semi-liquid materials, shall meet the requirements of this section.

C. Fills that are not impoundments shall be designed to meet the requirements of this section and use current, prudent engineering practices.

D. The plans and specifications for fills shall consist of an engineering design report that includes engineering calculations, drawings, and specifications. These shall take into account the size, location, and hazard potential of the fill and will include the following as necessary:

1. A site plan showing the location of the structure, associated access, surface and subsurface drainage systems, sediment control structures, and the proposed fill configuration.

2. Cross sections and profiles showing the original ground, proposed fill profile, location of terraces and constructed slopes.

3. Design details for all surface and subsurface drainage control structures.


5. A closure and final reclamation plan for the fill and associated structures.

E. Fills shall be constructed, operated, and maintained such that they perform in accordance with their design and purpose throughout the life of the fill.
F. Fills shall be constructed with slopes no steeper than two horizontal to one vertical for predominantly clay soils and no steeper than three horizontal to one vertical for predominantly sandy soils or must exhibit a static safety factor of 1.5 for other steeper slopes.

G. Fills shall be constructed, maintained and inspected to ensure protection of adjacent properties, preservation of public safety, and to provide prompt notice of any potentially hazardous or emergency situation.

H. Fills shall be closed and abandoned in a manner that ensures continued stability and compatibility with the post-mining land use.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


On-site generated waste shall not be disposed of within the permitted mine area without prior approval. On-site generated inert materials are approved for use as fill on the mining site provided they are capped with a minimum of four feet of soil cover and seeding is established per the approved reclamation plan. Off-site generated inert waste shall not be brought onto the mine permitted area or disposed of on the mine permitted area without prior approval.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes
Derived from Virginia Register Volume 30, Issue 6, eff. December 19, 2013.


A. Top soil required for reclamation shall be stored in such a manner as to remain available for reclamation. Top soil will be needed for future reclamation and shall not be removed from the permitted area unless authorized by the division.

B. The stockpiled top soil shall be seeded with quick growing grasses or legumes for stabilization until used in final reclamation.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-420. Screening.

A. Screening shall be provided for sound absorption and to improve the appearance of the mining site from public roads, public buildings, recreation areas, and occupied dwellings.

B. If screening is to be undisturbed forest, a distance of 100 feet must be left undisturbed within the permit boundary. Less than 100 feet may be approved if the natural vegetation provides the needed screening benefits between the mining operation and the adjacent property. Planted earth berms, tree plantings, natural topography, or appropriately designed fences or walls may be used if approved in the mineral mining plan.

C. On permanent berms for screening, the spoils (waste materials) shall be initially placed on the proposed berm area and top soil (where available) shall
be spread over the spoil areas, not less than six inches in thickness, and if possible, 12 inches in thickness. The remaining top soil shall be placed in a designated area for future spreading on other areas which need top dressing. The top soil shall be seeded or planted in accordance with the approved reclamation plan.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-430. Completion of active mining.

A. Except as provided in subsection B of this section, a mining operation, where no mineral has been removed or overburden removed or regraded for a period of 12 consecutive months, shall be declared complete and total reclamation shall begin.

B. At the option of the operator and with the director’s concurrence, an operation may remain under permit for an indefinite period during which no mineral or overburden is removed if the following conditions are met to the director’s satisfaction:

1. All disturbed areas are reclaimed to prevent erosion and sedimentation in accordance with mining plans and proper engineering practices.

2. All drainage structures such as culverts and ditches are constructed and maintained in accordance with mining plans and proper engineering practices.

3. All vegetation is maintained, including reseeding if necessary.

4. All improvements on site, including machinery and equipment, are maintained in a state of good repair and condition.

If the above conditions are not met, the permit may be revoked by the director in accordance with § 45.1-186.1 of the Code of Virginia.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-440. Drainage and sediment control.

All mining operations shall have adequate drainage, erosion, and sediment control measures installed and maintained in accordance with the approved drainage plan or as acceptable to the division. If adequate drainage, erosion, and sediment control measures cannot be provided, the permit for the affected portion or the entire mine may be denied.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


Drainage from disturbed areas shall be directed into a sediment basin before it is discharged from the permit area. Sediment basins shall be located as close to the disturbed area as possible. Sediment basins shall not be located in
perennial streams. Sediment control measures shall be installed prior to land disturbing activities within the drainage area controlled by the sediment basin. Each primary sediment basin shall provide at least 0.125 acre feet of storage capacity for each acre of disturbed land draining to it. Storage basins shall be cleaned as necessary to ensure proper functioning before they reach 60% capacity. Alternate sediment control measures that are as effective as sediment basins may be approved. The measures may include reduced basin storage capacity for small short-term disturbances, sediment channels, check dams, or mining methods that incorporate sediment control.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-460. Intermittent or perennial streams.

All intermittent or perennial streams shall be protected from spoil by natural or constructed barriers. Stream channel diversions shall safely pass the peak run-off from a 10-year, 24-hour storm. Stream channel diversions shall be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream of the diversion.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-470. Natural drainageways.

Drainageways shall be identified on the map submitted with the application. If it is necessary for the operation to cross or fill such a drainageway, properly engineered drainage structures shall be provided to allow free-flowing drainage and minimize erosion. Where necessary, water-retarding structures shall be placed in drainageways.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-480. Diversions.

Surface water diversions shall be installed as necessary where run-off has the potential for damaging property, causing erosion, contributing to water pollution, flooding or interfering with the establishment of vegetation. Diversions that will be removed in 18 months or less shall convey the peak run-off of a 1-year, 24-hour storm. Diversions that function more than 18 months shall be able to convey the peak run-off of a 10-year, 24-hour storm.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

The pH of all water discharge resulting from the mining of minerals shall be between pH 6.0 and pH 9.0 unless otherwise approved by the director. In addition, discharges shall be in compliance with applicable standards established by the Department of Environmental Quality (9 VAC 25-260-20).

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


A. Structures that impound water or sediment to a height of five feet or more above the lowest natural ground area within the impoundment and have a storage volume of 50 acre-feet or more, or impound water or sediment to a height of 20 feet or more regardless of storage volume, shall meet the following criteria (noted in Chapter 18.1 (§ 45.1-225.1 et seq.) of Title 45.1 of the Code of Virginia):

1. Impoundments meeting or exceeding the size criteria set forth in this section shall be designed utilizing a spillway flood and hazard potential classification as specified in the following table:

<table>
<thead>
<tr>
<th>Class of Impoundment*</th>
<th>Spillway Design Flood (SDF)**</th>
<th>Minimum Threshold for Incremental Damage Analysis***</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Hazard</td>
<td>PMF</td>
<td>0.50 PMF</td>
</tr>
<tr>
<td>Significant Hazard</td>
<td>0.50 PMF</td>
<td>100-year storm</td>
</tr>
<tr>
<td>Low Hazard</td>
<td>100-year storm</td>
<td>50-year storm</td>
</tr>
</tbody>
</table>

*Size and hazard potential classifications shall be proposed and justified by the operator and shall be subject to approval by the director. Present and projected development in the inundation zone downstream from the structure shall be used in determining the classification.

**The complete definitions of hazard potential are those contained in 4 VAC 50-20-40.

***The establishment of rigid design flood criteria or standards is not intended. Safety must be evaluated in the light of peculiarities and local conditions for each impounding structure and in recognition of the many factors involved, some of which may not be precisely known. Such can only be done by competent, experienced engineering judgment, which the values in the table are intended to add to, not replace.

Reductions in the SDF may be evaluated by use of incremental damage analysis described in 4 VAC 50-20-52. Note that future development downstream may increase the required SDF.
2. Impounding structures shall be constructed, operated, and maintained such that they perform in accordance with their design and purpose throughout their life.
   a. Impoundments shall be designed and constructed by or under the direction of a qualified professional engineer licensed in Virginia and experienced in the design and construction of impoundments.
   b. The designs shall meet the requirements of this section and use current prudent engineering practices.
   c. The plans and specifications for an impoundment shall consist of a detailed engineering design report that includes engineering drawings and specifications, with the following as a minimum:
      (1) The name of the mine; the name of the owner; classification of the impounding structure as set forth in this regulation; designated access to the impoundment and the location with respect to highways, roads, streams and existing impounding structures and impoundments that would affect or be affected by the proposed impounding structure.
      (2) Cross sections, profiles, logs of test borings, laboratory and in situ test data, drawings of principal and emergency spillways and other additional drawings in sufficient detail to indicate clearly the extent and complexity of the work to be performed.
      (3) The technical provisions as may be required to describe the methods of the construction and construction quality control for the project.
      (4) Special provisions as may be required to describe technical provisions needed to ensure that the impounding structure is constructed according to the approved plans and specifications.
   d. Components of the impounding structure, the impoundment, the outlet works, drain system and appurtenances shall be durable in keeping with the design and planned life of the impounding structure.
   e. All new impounding structures regardless of their hazard potential classification shall include a device to permit draining of the impoundment within a reasonable period of time, and at a minimum shall be able to lower the pool level six vertical inches per day, as determined by the owner’s professional engineer, subject to approval by the director.
   f. Impoundments meeting the size requirements and hazard potential of high, significant, or low shall have a minimum static safety factor of 1.5 for a normal pool with steady seepage saturation conditions and a seismic safety factor of 1.2.
   g. Impoundments shall be inspected and maintained to ensure that all structures function to design specifications.
   h. Impoundments shall be constructed, maintained and inspected to ensure protection of adjacent properties and preservation of public safety and shall meet proper design and engineering standards under Chapter 18.1 (§ 45.1-225.1 et seq.) of Title 45.1 of the Code of Virginia. Impoundments shall be inspected at least daily by a qualified person, designated by the licensed operator, who can provide prompt notice of any potentially hazardous or emergency situation as required under § 45.1-225.2 of the Code of Virginia. Records of the inspections shall be kept and certified by the operator or his agent.
   i. The operator will prepare an emergency action plan (EAP) that includes the following information:
      (1) A notification chart of persons or organizations to be notified, the person or persons responsible for notification, and the priority in which notifications are issued. Notifications shall include at a minimum the division,
the local government authority responsible for emergency response, and the Virginia Department of Emergency Management.

(2) A discussion of the procedures used for timely and reliable detection, evacuation, and classification of emergency situations considered to be relevant to the structure and its setting.

(3) Designation of responsibilities for EAP related tasks. Also, the EAP shall designate the responsible party for making a decision that an emergency situation no longer exists at the impounding structure. Finally, the EAP shall include the responsible party and the procedures for notifying to the extent possible any known local occupants, owners, or lessees of downstream properties potentially impacted by a failure of the impounding structure.

(4) A section describing actions to be taken in preparation for impoundment emergencies, both before and during the development of emergency conditions.

(5) Dam break inundation maps. Each sheet of such maps for high and significant potential hazard classification structures shall be prepared and sealed by a professional engineer. Where possible, inundation mapping in the EAP should be provided on sheets no larger than 11 inches by 17 inches to facilitate copying for emergency response.

(6) Appendices containing information that supports and supplements the material used in the development of the EAP, including plans for training, exercising, and updating the EAP.

(7) A section that identifies all parties with assigned responsibilities in the EAP and signed certification by all of those parties that a copy of the EAP has been received.

(8) Time periods for review or revision acceptable to the director.

3. Impoundments shall be closed and abandoned in a manner that ensures continued stability and compatibility with the post-mining land use.

4. The following are acceptable as design procedures and references:
   a. The design procedures, manuals and criteria used by the United States Army Corps of Engineers;
   b. The design procedures, manuals and criteria used by the United States Department of Agriculture, Natural Resources Conservation Service;
   c. The design procedures, manuals and criteria used by the United States Department of Interior, Bureau of Reclamation;
   d. The design procedures, manuals and criteria used by the United States Department of Commerce, National Weather Service;
   e. The design procedures, manuals and criteria used by the United States Federal Energy Regulatory Commission;
   h. Other design procedures, manuals and criteria that are accepted as current, sound engineering practices, as approved by the director prior to the design of the impounding structure.

B. Impoundments that do not meet or exceed the size criteria of subsection A of this section shall meet the following criteria:
1. Be designed and constructed using current, prudent engineering practice to safely perform the intended function.
2. Be constructed with slopes no steeper than two-horizontal-to-one-vertical in predominantly clay soils or three-horizontal-to-one-vertical in predominantly sandy soils.
3. Safely pass the runoff from a 50-year storm event for temporary (life of mine) structures and a 100-year storm event for permanent (to remain after mining is completed) structures.
4. Be closed and abandoned to ensure continued stability and compatibility with the post-mining use.
5. Be inspected and maintained to ensure proper functioning.
6. Provide adequate protection for adjacent property owners and ensure public safety.

C. Impoundments with impounding capability created solely by excavation shall comply with the following criteria:
1. Be designed and constructed using prudent engineering practice to safely perform the intended function.
2. Be constructed with slopes no steeper than two-horizontal-to-one-vertical in predominantly clay soils or three-horizontal-to-one-vertical in predominantly sandy soils.
3. Be designed and constructed with outlet facilities capable of:
   a. Protecting public safety;
   b. Maintaining water levels to meet the intended use; and
   c. Being compatible with regional hydrologic practices.
4. Be closed and abandoned to ensurecontinued stability and compatibility with the post-mining use.
5. Be inspected and maintained to ensure proper functioning.
6. Provide adequate protection for adjacent property owners and ensure public safety.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


If upon examination an operator determines that any water impounding structure in the permitted area has failed partially or completely, the incident must be reported to the division immediately.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes
Derived from Virginia Register Volume 30, Issue 6, eff. December 19, 2013.


Riprap shall be used for the control of erosion on those areas where it is impractical to establish vegetation or other means of erosion control or in any areas where rock riprap is an appropriate means of reclamation. Placing of rock riprap shall be in accordance with drainage standards and the approved
mineral mining plan. Other methods of stabilization may include gabions, concrete, shotcrete, geotextiles, and other means acceptable to the director.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-520. Revegetation.

Disturbed land shall be stabilized as quickly as possible after it has been disturbed with a permanent protective vegetative cover. The Mineral Mine Operator’s Manual provides guidance in the revegetation of surface mined areas. Exposed areas subject to erosion on an active mining site shall be protected by a vegetative cover or by other approved methods. Simultaneous revegetation shall be incorporated into the mineral mining plan. Reclamation shall be completed on areas where mining has ceased.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes


A. Slopes shall be graded in keeping with good conservation practices acceptable to the division. Slopes shall be provided with proper structures such as terraces, berms, and waterways, to accommodate surface water where necessary and to minimize erosion due to surface run-off. Slopes shall be stabilized, protected with a permanent vegetative or riprap covering and not be in an eroded state at the time reclamation is complete.

B. Crusted and hard soil surfaces shall be scarified prior to revegetation. Steep graded slopes shall be tracked (running a cleated crawler tractor or similar equipment up and down the slope).

C. Application of lime and fertilizer shall be performed based on soil tests and the revegetation requirements in the approved reclamation plan.

D. Vegetation shall be planted or seeded and mulched according to the mixtures and practices included in the approved reclamation plan.

E. The seed used must meet the purity and germination requirements of the Virginia Department of Agriculture and Consumer Services. The division may, at its discretion, take samples for laboratory testing. Noncritical vegetated areas shall achieve adequate cover so that no areas larger than one-half acre shall exist with less than 75% cover after two growing seasons. Seeded portions of critical areas shall have adequate vegetative cover so the area is completely stabilized.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes
4 VAC 25-31-540. Trees and shrubs.

Trees and shrubs shall be planted according to the specific post-mining land use, regional adaptability, and planting requirements included in the approved reclamation plan. For forest and wildlife post-mining land uses, at least 400 healthy plants per acre shall be established after two growing seasons.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-550. (Repealed.)

Historical Notes

PART V
ORDERS

4 VAC 25-31-560. Informal review.

Orders of the director may be reviewed through informal processes in accordance with § 2.2-4019 of the Code of Virginia.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes

4 VAC 25-31-570. Formal review.

Orders of the director, which are final agency actions for which no further informal resolution is available, shall be appropriately identified and may be appealed in accordance with § 45.1-194 of the Code of Virginia.

Statutory Authority
§§ 45.1-161.3 and 45.1-180.3 of the Code of Virginia.

Historical Notes