

**HIGHWAY CONSTRUCTION PRACTICES  
AND SURFACE MINING**

**REPORT OF THE  
VIRGINIA ADVISORY LEGISLATIVE COUNCIL  
to  
THE GOVERNOR  
and  
THE GENERAL ASSEMBLY OF VIRGINIA**



HD 19, 1966

COMMONWEALTH OF VIRGINIA  
Department of Purchases and Supply  
RICHMOND  
1966



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REPORT OF THE  
VIRGINIA ADVISORY LEGISLATIVE COUNCIL

Richmond, Virginia, January 4, 1966.

To:

HONORABLE A. S. HARRISON, JR., *Governor of Virginia*

and

THE GENERAL ASSEMBLY OF VIRGINIA

The term "surface mining" means to strip the earth by furrowing in the ground and opening the earth from the top to extract minerals. In recent years, surface mining of coal has become prevalent in certain counties of the State as a means by which coal can be extracted which cannot be mined underground. As a result of such operations, hilltops and mountainsides, if not reforested and revegetated, become ugly, barren spots in the midst of otherwise unmarred terrain. Another more serious condition resulting from failure to reclaim is siltation and soil erosion.

Another operation marring the scenic beauty of the State's landscape, is the creation of borrow pits, which are used to obtain sand and gravel for the construction of highways. With the vast federal Interstate Highway System, new construction of roads has reached on all-time high. Since these highways, by federal legislation, have no tourist attractions other than the natural beauty of the countryside, anything which detracts therefrom is more eye-catching. Of course highway construction is a vital part of the State's economy, both in the employment of personnel and increasing the tourist industry. Highway construction then is another vital industry of the State.

Thus, the conditions that these two industries create in the landscape beauty of Virginia are in some ways related and in 1964 the General Assembly adopted two resolutions: House Joint Resolution No. 40, directing the Virginia Advisory Legislative Council to make a report and study of the problems associated with surface mining, with a view to determining the need for statutes requiring the restoration of strip mined areas and to control future mining so as to prevent harmful effects on the beauty of the land used for such mining operations; and House Joint Resolution No. 52, directing the Virginia Advisory Legislative Council to make a study and report upon the steps necessary to be taken by the State Department of Highways to remove unsightly borrow pits. These resolutions follow:

HOUSE JOINT RESOLUTION NO. 52

*Directing the Virginia Advisory Legislative Council to make a study and report upon certain highway construction practices.*

Whereas, the Commonwealth is spending large sums of money in highway beautification, is controlling advertising along the highways,

and is taking other action to ensure that the beauty of Virginia will not be marred along our highways; and

Whereas, the use, in highway construction, of borrow pits along the highways tends to destroy the beauty of the countryside and it may be that measures can be devised for the restoration of the beauties of nature; now, therefore, be it

Resolved by the House of Delegates, the Senate concurring, That the Virginia Advisory Legislative Council is directed to make a study and report upon what steps can be taken by the State Department of Highways so that unsightly borrow pits will not be left along our highways. The State Department of Highways and all State agencies shall assist the Council in its study. The Council shall conclude its study and make its report to the Governor and the General Assembly not later than September one, nineteen hundred sixty-five.

#### HOUSE JOINT RESOLUTION NO. 40

*Directing the Virginia Advisory Legislative Council to make a study of surface mining in Virginia.*

Whereas, surface mining for coal has involved more than fourteen thousand acres of land in Southwestern Virginia; and

Whereas, surface extraction of other minerals has involved considerable land area throughout the State, some methods of surface mining accelerate and increase erosion, thus adding to the pollution of streams and shortening the useful life of water storage impoundments, and other methods of surface mining leave the land in an unsightly and unproductive condition, and reduce its residual taxable value; and

Whereas, the future economy of the State will require the utilization of all its lands for agriculture, forestry, recreation, industry, residential or other productive purposes; and

Whereas, for the benefit of future generations, better methods should be employed by most of the surface mining operations; now, therefore, be it

Resolved by the House of Delegates, the Senate concurring, That the Virginia Advisory Legislative Council is hereby directed to make a study of the problems associated with surface mining with a view of determining the need for laws requiring restoration of surface-mined areas and controlling surface mining operations in such a way as to minimize their harmful effects on the future use of mined areas. All agencies of the State shall assist the Council in its study. The Council shall conclude its study and report its findings to the Governor and General Assembly not later than September one, nine-

Because the subject matter of these resolutions is related, they were combined for study. The Council selected John H. Daniel, Charlotte Court House, Virginia, member of the House of Delegates and of the Council to serve as Chairman of the Committee to make the initial studies and report to it. The following were chosen to serve with Mr. Daniel on this Committee: Paul Brown, Honaker, a retired mining engineer; J. V. Clarke, Richmond, Director of Operations, State Department of Highways; George W. Dean, Charlottesville, State Forester; Dr. W. C. Elliott, Lebanon, member of the House of Delegates; Lyman C. Harrell, Jr., Emporia,

member of the House of Delegates; Thomas C. Johnstone, Arlington, executive, Krauser Company; Lawrence D. Langley, Arlington, Chesapeake and Potomac Telephone Company; J. M. B. Lewis, Jr., Roanoke, attorney at law and former Assistant General Counsel, Pocahontas Land Corporation; C. S. Luck, III, Richmond, Vice-President, Augusta Stone Corporation, and Dr. W. A. Pennington, Buckingham, member of the House of Delegates. Drs. W. C. Elliott and W. A. Pennington were elected Vice-Chairmen.

The Committee made a complete study of the subject matter, including an on-site investigation and inspection of surface mining areas in Southwestern Virginia. Public hearings were held in Bristol and Richmond after full publicity was given thereto. The views of all interested persons were sought and given in detail. Based on its study, the Committee reported to the Council.

After carefully considering the report of the Committee, the Council now presents its findings and makes the following recommendations:

## RECOMMENDATIONS

### *Surface Mining*

1. That legislation be enacted requiring strip mining operators to obtain a permit from the Division of Mines of the Department of Labor and Industry before undertaking any such operation.

2. At the time such permit is applied for, the applicant must furnish a plan for reclamation to be approved by the Director of the Department of Conservation and Economic Development, and after such approval is obtained, post a bond of fifty dollars per acre for every acre of land to be disturbed by such operation. This reclamation plan will contain a written agreement by the operator to perform reclamation on the area according to the approved plans.

3. Within thirty days after the anniversary date of the issuance of the permit, the operator must file with the Department of Conservation and Economic Development a written report of the reclamation work performed by him during the year for which the permit was issued. Upon receipt thereof, the Director of the Department of Conservation and Economic Development will inspect the reclamation and if he approves it, the operator's bond at the rate of fifty dollars per acre for each approved acre will be returned. If the Director does not approve, he shall advise the operator of the additional steps to be taken. The operator will have sixty days or such additional time as the Director may allow due to climatic conditions to undertake this additional reclamation.

4. Should the operator fail to complete satisfactorily the reclamation as ordered by the Director, his bond at the rate of fifty dollars per acre will be forfeited and the Department of Conservation and Economic Development will either reclaim the land itself or contract with other State agencies or private organizations to perform such.

5. If at the time the annual report is filed, it is found that the operator's approved estimate of disturbed land for which bond has been posted is less than that actually disturbed, additional bond at the rate of fifty dollars per acre will be required. On the other hand, if the acreage of disturbed land is found to be overestimated, the operator's bond or other security will be refunded at the rate of fifty dollars per acre for each acre overestimated.

6. All operators having a valid mining permit at the time of the enactment of the proposed legislation must comply with the provisions thereof within sixty days of its enactment or forfeit their permits.

7. The Division of Mines under the proposed legislation will retain its supervision of mine safety regulations.

8. Appeals from any order, rule or regulation issued by either the Division of Mines or Department of Conservation and Economic Development will first be taken to an intermediate Appellate Board, to be appointed by the Governor and to be composed of the Director of the Department of Conservation and Economic Development, a disinterested land owner and a coal mining operator. From this Board a further appeal may be taken to the circuit court of the county in which the land or a major portion thereof involved in the order, rule or regulation appealed from, is located. The latter appeal will not stay enforcement of the order, rule or regulation appealed from unless the court so orders upon a showing of good cause warranting such a stay.

9. This study should be continued by the Virginia Advisory Legislative Council so far as it relates to forms of mining other than coal mining such as but not limited to stone quarries, gravel pits and other such surface mining operations.

#### *Highway Construction Practices*

10. A resolution is proposed urging the State Highway Department to insert a provision in all future highway construction contracts requiring all gravel or borrow pits used in highway construction to be reclaimed to prevent land erosion, siltation and resulting unsightliness whether such are visible from the highway or not.

### BACKGROUND OF STRIP MINING

Coal is mined by the strip mining method in six counties of Southwest Virginia: Wise, Dickenson, Lee, Buchanan, Tazewell and Russell. Present day stripping is conducted on a large scale only in Wise and Dickenson but there are some operations being conducted in all of the other four counties. Strip mining is defined as "the mechanical removal of earth, called the overburden, which lies over a seam of coal, and then scooping out the coal itself." This operation is conducted above ground and employs no tunnels or shafts. Naturally, these operations can be conducted only where the coal deposits lie relatively close to the earth's surface. It has been estimated that the average thickness of the overburden at all strip mining operations in the United States is 46 feet. The deeper the coal the more difficult and expensive is the strip mining operation until a point of diminishing return is reached. No recorded strip mine has gone deeper than 100 feet and only a few have gone to a

Strip mining operations are of two types: contour stripping and area stripping. The particular type of method employed is dependent upon the topography of the land. Contour stripping is employed in hilly regions where the coal seams run along the slope of the hill. First, bulldozers lay out a footing for power shovels which are then brought in to scoop off the overburden. The resulting depression is termed a "cut." The shovels follow a seam of coal down to the cut, scooping off the overburden and depositing it at the outer edge of the cut. The width of the cut varies from 30 to 100 feet. The shovel then scoops up the coal and loads it into trucks to be hauled away. Pieces of equipment called "draglines"



closely resembling power shovels are used. Area stripping, on the other hand, occurs where the land is flat. Here the stripping is continuous over a large area. Thus, in either operation, almost all of the coal is extracted. This compares with underground mining where only 45% to 95% of the coal can be extracted.

In both contour and area stripping a completed strip mine operation leaves the earth as if furrowed by a large plow which has turned the earth upside down to a depth of 10 to 70 feet. The final furrow leaves a "pit" or "bench" on the unmined side of which stands a vertical precipice called the "high wall."

While not as earth moving as stripping, another type of mining called "auger mining" presents other problems in reclamation. This type mining has less overburden removed, but in order to prepare a surface for the auger equipment, a long continuous flat surface along the face of the seam of coal is opened.

According to the U. S. Bureau of Mines 1962 Report, strip coal mines in the United States produce 30.9% of the total coal production. This production was valued at more than 474 million dollars. Presently, there are 1,429 strip mines in the United States and most of them are in the small business classification producing less than 100 thousand tons. Of these 1,429 strip mines, 1,256 produce less than 100 thousand tons of coal per year; 33 produce more than an average of 500 thousand tons a year and only 52 operations produce tonnage of over a million tons; 88 companies produce between 100 thousand and 200 thousand tons. On this basis it is readily seen that the strip mining industry is conducted as a small business with the usual handicaps, namely, low margin of profit and no surplus on a net profit basis.

In Virginia, in 1964, there were 44 companies actively engaged in strip mining and a total of 2,451,649 tons were mined. The total acreage in strip mining is estimated to be in excess of 25,000 acres. Further, in Virginia areas which are strip mined are of two types and present different problems in accomplishing reclamation. These are: (1) where the coal and surface are owned by the same company; and (2) where the coal is owned by a coal company and the surface is owned by an individual landowner. While there are more smaller owners affected by this type mining, acreage-wise more strip mining is done in areas where both the coal and the surface are in larger holdings. Reclamation on the smaller holdings is usually more neglected than on the larger holdings due to the fact that more landowners are involved. However, one company neglecting reclamation on a large holding can add up to considerably more acreage than the total acreage of the smaller holdings.

Three public organizations have established areas for the study of different types of reclamation. These are: The Soil Conservation Service, The Tennessee Valley Authority and The Virginia Division of Forestry. In addition to these study areas a number of plantings have been made in cooperation with landowners and are available for observation and study. The Division of Forestry has been primarily concerned with the adaptability of forest tree seedlings on the disturbed areas.

What happens to the resulting landscape in many cases after stripping? After any stripping operation, high piles of overburden stand row upon row. Various elements are exposed and may result in the formation of acid pools which lie stagnant. Soil erosion then causes these acid pools to drain in the streams, polluting them, ruining lower riparian land, and killing fish and game. A United States Senator once stated recently on

the floor of the Senate: "I can only say that if anybody with any sense of the esthetic value goes into the strip mining areas and sees what has been done, he can do nothing else but weep at the cruelty of mankind in destroying and butchering the beauty of the land."

As was brought out at the public hearings and seen by the Committee by personal inspections, over 75% of strip mine operators do an adequate job of reclaiming strip mined land. However, there is a small minority, less than 25%, who for some reason or another best known to them, do no reclamation at all. In addition, there are many areas of the mountainous sections of the State from which strip mine operators have withdrawn leaving the mountainsides an ugly eyesore. It is therefore necessary that some form of State regulation to compel reclamation of these areas in the future be enacted.

## REASONS FOR RECOMMENDATIONS

1. From the studies conducted, it was shown that over 75% of surface mining operators voluntarily reclaim by revegetation and reforestation land they have strip mined. A small minority of operators have neglected reclamation and as a result the State has several thousand acres of land that have not been properly reclaimed. In addition to damage to scenic beauty, the leaving of unrevegetated trenches and cuts has caused soil erosion and siltation, which has and will continue to create serious problems. In view of this the Council is convinced compulsion of some nature must be applied to ensure that all surface mined areas will be reclaimed. To the operators already offering voluntary reclamation, no hardship will result to them from any compulsory legislation.

The proposed legislation requires the issuance of a permit from the Division of Mines of the Department of Labor and Industry for any future surface mining operation. The Division of Mines was selected as the issuing agency because it is most conversant with mining operations and can best deal with mining interests and their problems. The Division will continue to issue safety regulations and generally oversee the extraction of minerals.

At the same time, it was thought that some other existing State agency conversant with the outdoors and with plant life should supervise the reclamation projects and make rules and regulations covering them. The Department of Conservation and Economic Development with its Divisions of Forestry, Mineral Resources, Parks, Public Relations and Advertising and Water Resources, already has the basic organization to administer such a program. To add the duty of overseeing strip mining reclamation will merely necessitate the addition of personnel. For this principal reason this Department was selected to supervise this phase of surface mining.

2. When a mining permit is applied for the applicant must submit a plan of reclamation for land to be disturbed and furrowed by such mining operations. Before any permit can be issued to surface mine, the Department of Conservation and Economic Development must approve the plans offered by the operator or if such are disapproved, the Department will issue such amended plans as are acceptable to which the operator must agree in order to obtain a mining permit. It was thought advisable to have the plan approved before any mining was begun to ensure that the work would be done according to the plan developed and acceptable to the Department. Such not only creates uniformity but ap-

prises the operator of the job he is expected to do. Also, testimony was presented to the Committee that in many cases reclamation could be performed more expeditiously and economically while the mining operations were progressing and while the heavy mining equipment was on the land to perform grading and resurfacing.

To guarantee the performance of the required work, a bond of fifty dollars per acre of land estimated to be disturbed is required. The fifty dollar figure was arrived at after considering the experience of other states where the cost of reclaiming varies from thirty to seventy-five dollars an acre. This amount is the average. If the operator performs the reclamation work in a manner acceptable to the Department at his own expense, his bond will be refunded. If, on the other hand, the work is not performed or is performed unsuccessfully, and the operator neglects or refuses to complete it satisfactorily, the bond covering each acre affected is forfeited and the amount thereof will revert to the State to defray the cost of reclaiming, which will be conducted by the Department or under its direction.

3. Once every year, the operator will be required to file with the Department a complete report of the reclamation work he has performed. Based on this report, the Department of Conservation and Economic Development will inspect the operation sites to determine whether the work has been satisfactorily completed. The requirement of an annual report was recommended to keep a current check on the reclamation and to ensure current compliance with the agreed plan. Any minor infractions can be remedied probably to the operator's advantage as his equipment and manpower will be immediately available for such follow-up work as the Director believes advisable. Also, if the operator refuses to complete satisfactorily his agreed work, the Director can step in and lessen the damage by his prompt attention thereto. Thus serious soil erosion and siltation problems can be avoided.

4. As stated before, should an operator fail to complete satisfactorily the reclamation work, his bond would be forfeited. The Department of Conservation and Economic Development is then charged with the responsibility of completing this work. As conditions vary, it was deemed wise to vest this Department with the discretion to either perform the work itself or contract with other State agencies or private enterprise to undertake it. The Department in all events would supervise such projects but the case might arise where contracting this work out to private industry might be more economical and expeditious. Therefore, this discretion was given the Director.

5. Another advantage of an annual report of reclamation is that it would keep check on the estimate of land involved in a strip mining operation. Very often, these operations progress faster than originally estimated. Should this occur and more acres are involved than originally estimated, the operator would then file additional bonds for each acre exceeding his original estimate. It is essential that this reclamation be performed either by the operator or the State in the event of the operator's failure. Sufficient money must be available to finance the State's part in this program and be readily available. This recommendation will ensure the availability of sufficient money at all times for any reclamation the State is required to perform.

Also, if the acreage of land to be disturbed has been overestimated, the operator's bond or other security will be refunded at the rate of fifty dollars per acre for the amount of land overestimated.

6. Because of the immediate and pressing need to halt soil erosion and siltation resulting from unreforested, un revegetated land after surface mining, it was thought advisable to bring all existing mine licenses under which the operators are conducting surface mining operations under the provisions hereof. Code § 45-17.1 requires a license for commercial mining operations and presently this covers all types of mining operations. It is recommended that any existing mine operation encompassing strip mining be required to obtain a permit hereunder. The need for reclaiming exists and every acre of land in the State which can be reforested or revegetated is an acre saved. Operators presently engaged in strip mining are given sixty days to obtain such a permit, after the enactment of the proposed statute.

7. The proposed legislation relates only to reclamation. The Council made no study of other mining operations as such. Its sole concern was the landscape. It is believed that the Department of Conservation and Economic Development can best supervise this. As far as actual mining techniques and procedures are concerned, the Division of Mines is best equipped and experienced in these, and best able to supervise them.

8. An intermediate review of the orders, rules and regulations issued under the proposed statute was recommended in order to conserve time and money. Reclamation in many instances can be performed more efficiently and economically if performed during or immediately following a strip mining operation. Court appeals are a constitutional right and every citizen is entitled to his day in court. However, such appeals are time and money consuming. Since it is envisioned that the majority of appeals will concern methods rather than legal principles it was thought advisable to create the Board of Reclamation Review comprised of the Director of Conservation and Economic Development, an operator and a landowner, the latter two to be appointed by the Governor. These three persons represent the interests of every one concerned and if an amicable agreement can be reached this Board should be able to find the way to reach it.

From the ruling of this Board, a court appeal is provided to the circuit court of the county in which the greater portion of the land in controversy is located. Such circuit court is familiar with the local conditions involved and is physically nearer the area and easily accessible to the operators involved. In order to expedite compliance with the orders, rules and regulations it was thought advisable to provide that any order, rule or regulation appealed from would not be automatically stayed or inoperative while the court appeal is pending. Discretion is vested in the appellate court to stay the enforcement thereof if a proper showing of necessity therefor is made to it. We feel no great hardship will result.

9. Because the study of surface coal mining operations was so extensive and necessitated considerable time, sufficient information could not be gathered on problems arising from stone quarries, gravel pits and surface mining operations other than coal. These forms of surface mining create separate problems which merit the undivided attention of the Council. A thorough examination of the mining practices and techniques of these industries will be necessary before intelligent conclusions can be reached on what legislation, if any, is needed to solve soil erosion, and siltation problems arising therefrom. Also included is the unnecessary destruction of the State's scenic beauty. Such a study will be quite an extensive one and we believe should be undertaken immediately.

A resolution to effect this recommendation is attached.

## HIGHWAY CONSTRUCTION PRACTICES

10. With the vast construction of new highways in Virginia, gravel pits or borrow pits are essential near scenes of construction in order to provide materials for such construction. However, leaving these pits unreclaimed after construction is completed causes soil erosion and siltation which seriously damage the land of this State, and cause resulting unsightliness along many State highways.

The State Highway Commissioner was consulted about possible action in reference to this matter and voluntarily agreed to take whatever steps were necessary to curb soil erosion and siltation. For many years the Highway Department has insisted that highway contractors cover such pits when visible from the highway. However, after consultation with the Commissioner, it was felt that all material pits, whether they are visible from the highway or not, must be reclaimed to prevent soil erosion and siltation. Therefore, the Council recommends that a resolution be introduced in the 1966 General Assembly urging the State Highway Department to insert in all future highway construction contracts a provision requiring the covering and reclamation of all material pits used in highway construction.

The Division of Forestry and the United States Soil Conservation Service have volunteered to cooperate with the Highway Department in selection of plants for reclamation and of possible sites for future use as material pits. This service is voluntary. However, the State Highway Commissioner, through the landscape department therein, has agreed to work hand-in-hand with the Division of Forestry and the United States Soil Conservation Service along the lines suggested above and will do all in his power to remove these material pits from Virginia's scenic landscape.

Proposed legislation to set forth the recommendations of the Council is attached to this Report.

## ACKNOWLEDGMENTS

We express our appreciation to the members of the Committee for the great amount of time and effort which they gave to this study. We also express our appreciation to all who afforded the Committee the benefit of their knowledge and views both at public hearings and in conference.

Respectfully submitted,  
EDWARD E. WILLEY, *Chairman*  
TOM FROST, *Vice-Chairman*  
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*A BILL to require licenses for certain surface mining operations and to fix conditions for issuance thereof; to provide that certain reclamation be performed by licensees and for inspection thereof; to authorize reclamation to be performed or contracted for by the Department of Conservation and Economic Development under certain circumstances; to create a Board of Reclamation Review and to provide for appeals from rulings of such board; to provide penalties for violations; and to create a special fund for reclamation purposes and provide for expenditures therefrom.*

1. § 1. 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) Strip mining—The process of recovering coal by removing the strata, earth, or materials, hereinafter referred to as the overburden, which overlies coal deposits in their natural state.

(b) Disturbed land—The areas from which overburden has been removed in coal mining operations, plus the area covered by the spoil, plus any areas used in such mining operations which by virtue of their use are susceptible to excess erosion. Access roads serving as fire breaks whose purpose is primarily for fire fighting or continued use are excluded from this definition, but the banks thereof are included.

(c) Overburden—All of the earth and other material which lie above a natural deposit of coal and also other materials after removal from their natural state in the process of strip mining.

(d) Spoil bank—A deposit of removed overburden.

(e) Operator—Any individual group of individuals, corporation, partnership, business trust, association or any other legal entity which is engaged in strip mining and which disturbs more than one-quarter acre of land or removes, or intends to remove, more than one hundred tons of coal in any twelve month period from any such land.

(f) Director—The Director of the Department of Conservation and Economic Development.

(g) Department—The Department of Conservation and Economic Development.

(h) Division—The Division of Mines of the Department of Labor and Industry.

(i) Chief—Chief of the Division of Mines.

§ 2. It shall be unlawful for any person or operator to engage in strip mining of coal in this State, without having first obtained from the Division a permit to engage in such operation and paying a fee therefor of one hundred fifty dollars. Application for a strip mining permit shall be made in writing on forms prescribed by the Chief 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 Chief, shall contain the following information: (1) the common name and geologic title, where applicable, of the seam of coal to be extracted; (2) a description of the land upon which the applicant proposes strip 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; (3) the name and address of the owner or owners of the surface of the land; (4) the name and address of the owner or owners of the coal; (5) the source of the operator's legal right to enter and conduct operations on the land to be covered by the permit; (6) the total number of acres of land to be covered by the permit; (7) a reasonable estimate of the number of acres of land that will be disturbed by mining on the area to be covered by the permit during the ensuing year; (8) whether any mining permits are now held by the applicant and the number thereof; (9) 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 (10) if known, whether applicant, 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 item (9) above, has ever had a mining permit issued under the laws of this or any other State revoked or has ever had a strip mining bond, or security deposited in lieu of bond, forfeited.

No permit shall be issued by the Division until it has received approval in writing from the Department of the plan of reclamation required in § 3 and the bond from the applicant as required in § 4.

§ 3. At the time of filing an application for a permit, each operator shall file with the Department a plan for reclamation of all disturbed land estimated to result from the mining operations for which a permit is sought. The plan for reclamation shall be submitted on a form to be prescribed by the Director and shall contain such information as the Director may require. The plan shall contain an agreement by the operator to:

(1) Remove metal, lumber and other debris resulting from mining operations.

(2) Regrade the area in a manner to be established by rules and regulations of the Director, which shall include the following:

(a) Grade the surface of all deposits of removed overburden so as to reduce the peaks and the depressions between peaks to a surface which will be a gently rolling topography. Such grading shall be done in a way as will minimize erosion due to rainfall, eliminate grades between peaks and make the surface more suitable for grazing, tree growing, tree cutting or recreation.

(b) Grade the surface in such a manner as to preserve existent access truck roads and truck roads on and along the bench, and to grade the surface on areas where truck roads do not exist in such a manner that serviceable truck roads may be constructed with minimum cost by persons other than the operator for the purposes of forest fire control or recreation.

(c) Grade loose coal, refuse and other debris on the bottom of the last cut so as to reduce the piles of such material in accordance with good conservation practices.

(d) Plant trees, shrubs, grasses or other plants upon the parts of such area where revegetation is possible.

(e) Where the operator elects to impound water to provide lakes or ponds for wildlife, recreational or water supply purposes, such operator shall file a formal request with the Department and obtain approval before such ponds or lakes can be created in impounding such water.

§ 4. Each operator at the time of filing his application shall furnish bond on a form to be prescribed by the Chief payable to the Department and conditioned that the operator shall faithfully perform all of the requirements of this act and of the plan and directions for reclamation as approved and directed by the Department. The amount of bond shall be fifty dollars per acre, based upon the number of acres of land which the operator estimates will be disturbed by strip mining during the next ensuing year. The minimum amount of bond furnished shall be twenty-five hundred dollars. Such bond shall be executed by the operator and by a corporate surety licensed to do business in this State: provided, however, that in lieu of such bond the operator may deposit cash or collateral security acceptable to the Chief.

§ 5. Upon receipt of the plan for reclamation and bond prescribed above, the Director shall review the plan and if it meets his approval certify this fact to the Division. If the Director disapproves the plan, he shall furnish the applicant and the Division with his written objections thereto and his required amendments. Until the applicant shall amend his plan of reclamation to meet the Director's objections and file a satisfactory amended plan with the Director, no permit shall be issued.

Upon receipt of the Director's approval and the required bond, the Chief shall issue the permit unless he finds that the applicant is or has been affiliated with or managed, or controlled by, or is or has been under common control with a person, partnership, association, trust or corporation which has had a surface or strip mining permit revoked or bond or other security forfeited for failure to reclaim lands as required by the laws of his State, in which event no permit shall be issued. Except, however, if an operator who has heretofore forfeited a bond pays the cost of reclamation borne by the Department in excess of the recovery by the Department upon the forfeited bond such operator shall then, upon compliance with the provisions of this act become eligible for a permit.

§ 6. Within thirty days following the anniversary date of the issuance of any permit the operator shall post additional bond in the amount of fifty dollars per acre for each additional acre of land estimated by him to be disturbed during the next year following the anniversary date of the permit. At this time bond previously posted may be released for any area upon which reclamation work has been completed and the approval of the Director 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) a map certified by a licensed land surveyor or engineer 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.



§ 7. Upon receipt of the report called for in § 6, the Director shall cause an inspection to be made of the land described in the report. If he shall approve the reclamation work completed by the operator, he shall notify the Division in writing and it shall order the return of the bond or other security to the operator at the rate of fifty dollars per acre for each acre of land or part thereof satisfactorily reclaimed. If the Director does not approve the reclamation work, he shall notify the operator immediately in writing and advise him of what additional steps he deems necessary to satisfactorily complete the reclamation. In such event, the operator shall have ninety days from the receipt of the Director's order to begin such additional reclamation and present satisfactory evidence to the Director that such work is in progress. The bond or other security posted by the operator for such land shall not be refunded until he has obtained the Director's approval as aforesaid, and the Director has notified the Division in writing to this effect.

If the operator does not undertake to complete the reclamation in accordance with the notification of the Director and submit evidence to the Director that such work is in progress within ninety days of such order or within such additional period of time not to exceed six months which may be granted the Director for cause shown, the Director shall request, and the Chief shall order a forfeiture of the bond or other security posted by the operator at the rate of fifty dollars per acre or part thereof for each acre of land involved. The Chief shall certify the fact of forfeiture to the Attorney General who shall proceed to collect the amount thereof, which, when collected, shall be deposited in the State treasury in a special fund to be used by the Director in performing reclamation under the provisions of this act. Furthermore, following the order of forfeiture the Director shall perform such reclamation operations as he deems necessary with the resources and facilities of his Department or as provided by § 17 hereof, the cost thereof to be paid from the proceeds of the special fund above created.

§ 8. 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.

§ 9. 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 State 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 act and the Chief shall then release an equivalent amount of bonds of the operator originally furnishing bond on the disturbed area.

§ 10. Any operator holding a valid commercial mining license under which strip mining operations are being conducted shall comply with the provisions hereof within sixty days after the effective date of this act and obtain a permit under § 2 hereof or forfeit his right to conduct strip mining operations under such license.

§ 11. All provisions of the mining laws of this State intended to safeguard life and property shall extend to all strip mining operations

insofar as such laws are applicable thereto. The Chief shall have the power and authority to promulgate reasonable rules and regulations to effectuate the purposes of this act and to protect the safety of those employed in and around surface mines. For the administration of mining laws and regulations, all strip mining operations shall be supervised by the Division.

§ 12. Any violation of any provision of this act or of any order of the Director of Chief shall be a misdemeanor punishable by a maximum fine of one thousand dollars or a maximum of one year in jail, or both.

§ 13. An appeal from any order, rule or regulation of the Department or Division shall be taken first to the Board of Reclamation Review hereinafter created. Such appeals shall be taken within twenty-one days following the issuance of such order, rule or regulation. Any party desiring to appeal shall file with the Board of Reclamation Review a notice of appeal designating the order, rule or regulation appealed from, and send a copy thereof by registered mail to the Director of the Chief issuing such.

Upon receipt thereof, the Board shall set the hearing at a place within the county where the major portion of the land involved in the order, rule or regulation appealed from is located and such hearing shall be held by the Board within sixty days of the date notice of appeal is received.

The Board shall have the power to subpoena and bring before it any person in this State or take testimony of any such person by deposition with the same fees and mileage in the same manner as prescribed by law in judicial procedure in courts of this State in civil cases. Any party to any hearing before the Board shall have the right to the attendance of witnesses in his behalf at such hearing upon making request therefor to the Board and designating the person or persons sought to be subpoenaed.

The Board after conducting a hearing shall enter an opinion either affirming the order, rule or regulation appealed from or modifying it and such opinion shall be final unless appealed to the court.

§ 14. There is hereby created the Board of Reclamation Review to be composed of the Director of the Department of Conservation and Economic Development and two members to be appointed by the Governor, one of whom shall be a coal strip mining operator who has been engaged in such operation continuously for five years preceding his appointment, and one property owner who at the time of his appointment owns land upon which strip mining operations have been or are being conducted. The appointive members shall serve for terms of four years each, except appointments to fill vacancies which shall be for unexpired terms, all of whom shall hold office at the pleasure of the Governor for their respective terms. The Board shall elect its own chairman. The members of the Board shall receive no compensation for their services but shall be entitled to receive their necessary traveling and other expenses incurred in the performance of their duties. The sole duty of the Board shall be to hear appeals from orders issued by the Department or Division under this act, and the procedure for determining such appeals shall be as provided by § 13 hereof.

§ 15. Any person aggrieved by any opinion issued by the Board shall have the right of appeal to the circuit court of the county in which the land or a major portion thereof which is involved in the opinion

appealed from, is located. Such appeal shall be filed within twenty-one days after the opinion is rendered. The filing of an appeal hereunder shall not automatically stay the effect of the opinion appealed from, but, if on application to the court, undue hardship is shown to result, the court in its discretion may suspend the execution thereof and fix the terms.

§ 16. In approving plans of reclamation 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.

§ 17. In addition to other legal processes, the Division or Department may seek injunctive relief to enforce any order, rule or regulation issued by it.

§ 18. The Director, in performing reclamation work under this act, may enter into contracts for the performance of such work with any individual, group of individuals, corporation, company, partnership or similar business entity, any soil conservation district, or any agency of the State or federal government. After a contract is entered into by the Director with anyone other than the operator, the operator shall be relieved from all further liability and responsibility in reference to reclamation of the disturbed land.

2. To carry out the purposes of this act there is hereby appropriated from the general fund of the State treasury a sum sufficient estimated at fifteen thousand dollars for the first year of the biennium, 1966-1968, and twenty-seven thousand dollars for the second year.

## HOUSE JOINT RESOLUTION NO.

*Requesting the Department of Highways to perform certain functions relative to highway construction practices.*

Whereas, the Department of Highways is engaged in the construction of various systems of highways throughout the State; and

Whereas, during the course of such construction, it is necessary to make use of land areas that contain material suitable for construction purposes; and

Whereas, in making use of such areas, it is necessary to remove material in such a manner so that depressions of various sizes and depths are left which may contribute to land erosion, siltation of nearby streams and general unsightliness of the surrounding vicinity; and

Whereas, during the course of such construction, it is also necessary to use nearby land for the disposal of material unsuitable for highway construction purposes which practice may also have like results; now, therefore, be it

Resolved by the House of Delegates, the Senate concurring, That the Department of Highways is hereby requested to develop methods and otherwise be responsible for the restoration of local material pits and waste areas that are left after highways construction terminates so that surrounding lands and streams are, insofar as is feasible, kept in their normal condition and are not damaged by erosion and siltation; and be it further

Resolved, That the Department of Highways is hereby urged to include in highway construction contracts, whenever appropriate, a requirement that the contractor reclaim gravel and borrow pits and restore waste areas, including those not visible from any highway, to prevent land erosion, siltation and resulting unsightliness throughout the Commonwealth and to preserve the natural scenery of the highway corridors.

## HOUSE JOINT RESOLUTION NO.

*Directing the Virginia Advisory Legislative Council to continue its study of surface mining operations.*

Whereas, the Virginia Advisory Legislative Council made a study of surface mining in Virginia and in its report pointed out that because of the limitation of time its study was restricted to surface mining of coal operations and it did not consider other types of surface mining which require further study and consideration, now, therefore, be it

Resolved by the House of Delegates, the Senate concurring, That the Virginia Advisory Legislative Council is hereby directed to continue its study of all forms of surface mining other than strip coal mining, with a view to determining the need for laws requiring restoration of mined areas and control of mining operations in such a way as to minimize their harmful effects on the future use of such areas. The Council shall conclude its study and report its findings to the Governor and the General Assembly not later than October one, nineteen hundred sixty-seven.