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# Improvements Needed In Administration Of Federal Coal-Leasing Program

B-169124

Department of the Interior

*BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES*

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MARCH 29, 1972



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-169124

Dear Senator Metcalf:

This is our report on improvements needed in administration of the Federal coal-leasing program by the Department of the Interior.

Since the date of your request, the Department has made several revisions in its policies principally with regard to the payment of rental and royalties. The Department's policy revisions were made after we had substantially completed our fieldwork which showed that the then-existing policies needed improvement. Subsequently we evaluated, to the extent practicable, these policy changes. Our principal observations on these matters, as well as on other matters noted in our review, are summarized in the digest which appears at the beginning of the report.

As a result of an agreement reached with your office, we obtained and incorporated in the report the comments of the Department of the Interior on matters discussed in the report.

*C2 + R2*  
*C3 + R3* Also as a result of an agreement reached with your office, copies of this report are being sent today to Senator Gaylord Nelson and to Congressman Robert W. Kastenmeier who had requested that the General Accounting Office review the Department's coal-leasing program. Copies are also being sent to the Secretary of the Interior.

Sincerely yours,

Comptroller General  
of the United States

*U + R*  
The Honorable Lee Metcalf  
United States Senate

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D I G E S T

WHY THE REVIEW WAS MADE

At the request of Senator Lee Metcalf, the General Accounting Office (GAO) reviewed the Department of the Interior's program for leasing Federal lands to be used for mining coal. GAO sought to determine whether

- lease terms required adequate land conservation work to be undertaken in connection with coal mining,
- there had been adequate competition in the leasing of the Federal lands, and
- the Government was receiving equitable royalties for coal extracted.

The review was made in Colorado, Montana, Utah, and Wyoming.

FINDINGS AND CONCLUSIONS

Reclamation of Leased Federal Lands

GAO examined into the conditions of Federal lands at five underground mines and at seven strip mines that were subject to reclamation requirements under the terms of Federal leases.

At the five underground mines, there was no significant visible damage to the surface of Federal lands.

Federal lands at three of the seven strip mines had been restored to the approximate condition of the surrounding area. At two other mines the reclamation work consisted primarily of leveling the tops of spoil banks--piles of earth and other materials which were removed to expose coal deposits--to a width of 25 feet. This was considered acceptable by Geological Survey regional officials. At another mine the spoil banks had been leveled but not to the required 25-foot width. Steep banks existed at the other mine at the time of the GAO visit but, according to a Geological Survey regional official, had subsequently been sloped to an acceptable level.

At the mines visited by GAO, the most satisfactory reclamation work was undertaken primarily as a result of reclamation policies established voluntarily by mine operators or the need to comply with State law.

The Interior Department issued regulations in January 1969 which, if properly implemented, should provide for improved reclamation of Federal lands damaged by coal-mining operations.

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These regulations, however, do not apply to leases issued before January 1969 and will not be applicable to such leases until they are adjusted, which in some cases might not be until 1988.

Geological Survey has not issued guidelines to its regional staff setting forth the manner in which the requirements contained in the leases issued or adjusted prior to 1969 should be enforced. GAO believes that there is a need for the issuance of such guidelines. (See p. 8.)

Limited mining of coal  
on leased Federal lands

Only limited mining of coal has been conducted on leased Federal lands.

Most lessees apparently have no immediate plans to initiate mining operations in the near future. The Interior Department has permitted lessees to defer mining of coal resources by issuing leases for indeterminate periods having no requirement that the coal be mined if the lessees make minimum royalty payments for 1 year in advance. (See p. 22.)

In view of this situation, GAO believes that the lease terms should provide for termination of a lease if mining of the coal is not undertaken in a reasonable time. (See p. 32.)

Limited competition  
for leases of Federal lands

Although there has been little competition for the leasing of Federal coal lands, Interior Department officials attributed the lack of competition to the low demand for coal. (See p. 30.) A recent study, however, indicates that there is an upsurge of interest in the leasing of Federal lands where much low-sulphur coal exists. (See pp. 28 and 29.)

Two recent Federal coal lease offerings in Wyoming resulted in substantial competition for the leases and in higher bonus bids than had been received in the past. (See p. 31.)

Improved procedures needed  
for determining royalties

The Government has not received equitable royalties for coal produced on Federal lands

--because royalties have been computed on the basis of a fixed amount a ton which has not taken into account variances in costs of extracting the coal and in the coal selling prices and

--because increases in royalty rates have not been applied to outstanding leases on a timely basis; adjustments in the terms and conditions of Federal leases can be made only at 20-year intervals.

In February 1971 a new method was adopted, which provides that royalties be computed on a percentage of the value of coal mined. The rate of percent is

determined by the type of mining to be employed and the depth of the coal deposits. In effect this gives consideration to the cost of extracting the coal and to coal selling prices. The new method, however, will not be applicable to existing leases until their terms are adjusted at the expiration of the 20-year periods. (See p. 34.)

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Leases of Federal lands in force appear to have no built-in mechanism for adjusting royalty rates or other key lease terms, such as rental rates and those relating to the protection of the environment and the rehabilitation of Federal lands disturbed by mining operations, except at 20-year intervals from the date of the issuance of the leases.

Such lease terms may be too restrictive for the Interior Department to manage its coal resources effectively.

A degree of certainty or stability in lease terms is needed by lessees to permit them to properly plan their operations. The Interior Department, however, should determine whether its leases should provide broader administrative discretion so that, when the Department wishes to revise or add new important lease terms, it will not have to wait until the 20-year adjustment period to incorporate such changes into all leases in force. (See p. 38.)

#### RECOMMENDATIONS OR SUGGESTIONS

The Secretary of the Interior should:

- 2 --Require the Geological <sup>215</sup>Survey to issue guidelines and procedures for use by its regional mining supervisors in enforcing the reclamation and environmental requirements contained in most leases until the leases are adjusted to include the stronger reclamation and environmental requirements established in January 1969. (See p. 21.)
- Consider discontinuing the practice of issuing leases for Federal lands that permit lessees to defer or suspend mining operations on Federal lands by the payment of a minimum royalty for 1 year in advance unless lessees can justify that development or operations should be deferred or suspended. (See p. 33.)
- Initiate a study to determine the desirability of seeking a change in the law that would permit the adjustment of royalty rates and other lease terms on a more timely basis. (See p. 38.)

#### AGENCY ACTIONS AND UNRESOLVED ISSUES

The Department currently is reviewing its coal-leasing program and will give consideration to GAO's recommendations in its study. (See ch. 5.)

## CHAPTER 1

### INTRODUCTION

In accordance with a request from Senator Metcalf, we examined into the Department of the Interior's program of leasing Federal lands for the purpose of mining coal. (See app. I.) Pursuant to this request and agreements reached with his office, we reviewed certain leases of Federal lands in the State of Montana and in the three States--Colorado, Utah, and Wyoming--from which the largest amount of coal is mined from public lands.

The review was directed toward evaluating whether (1) the lease terms should be strengthened to meet conservation needs, (2) the bidding arrangements resulted in adequate competition, and (3) the royalty rates provided an equitable return to the Government. We reviewed the Department's regulations, memoranda, and pertinent instructions relating to the leasing program, including an analysis of recent changes made by the Department. We also examined into other matters which we considered pertinent to an evaluation of the Department's leasing program.

Under the Mineral Lands Leasing Act (30 U.S.C. 181), also known as the Mineral Leasing Act, and, under the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351), Federal lands containing coal deposits, except certain specifically excluded lands, such as those in national parks, may be leased for the purpose of mining coal.

The Bureau of Land Management and the Geological Survey in the Department of the Interior and the Forest Service in the Department of Agriculture are the agencies most concerned with the management and disposition of Federal coal resources.

The Bureau, through its offices in the various States, processes applications for (1) permits to explore Federal lands for coal resources and (2) leases of Federal lands for the purpose of mining coal.

The Survey is responsible for providing scientific and technical advice to the Bureau to assist it in making



decisions on applications to explore for coal or to lease land to mine coal. Before action is taken on applications for prospecting permits and leases, the Bureau's offices obtain reports from the Survey which include recommendations on (1) the question of whether a permit should be issued or a lease should be entered into, (2) the acreage to be covered by the permit or lease, (3) the royalty rate, (4) the rental rate, and (5) the bonus bid--a one-time payment for the privilege of obtaining a lease.

Also the Survey exercises technical supervision over leasing activities for compliance with the terms and conditions of exploratory permits and leases, operating regulations, and statutes, including the collection of royalties.

Other agencies having jurisdiction over the surface of the lands, such as the Forest Service, issue reports to the Bureau on whether a permit should be issued or a lease should be entered into. The reports may contain recommendations on special provisions to be included in the lease or permit, such as a stipulation covering forest fires, which obligates the lessee to assist in the prevention and suppression of fires.

In accordance with the provisions of the Mineral Leasing Act and as further defined by the Department's regulations, coal prospecting permits and leases are issued as follows:

1. Lands which are known to contain coal deposits in sufficient quantities to support a commercial operation and which are available for leasing are leased by the Bureau under competitive bidding procedures to the applicant who submits the highest bid.
2. For lands where prospecting or exploratory work is necessary to determine the existence or workability of a coal deposit, a prospecting permit may be issued by the Bureau for a primary term of 2 years and, under certain conditions, it may be extended for an additional 2-year period.

3. If, prior to the expiration of the permit, the permittee can show that the lands contain coal in quantities sufficient to support a commercial operation, he is entitled to a preference-right lease for all the lands or part of the lands. Such leases are awarded by the Bureau without benefit of competition.

By Department regulations each permittee is required to pay an annual rental of 25 cents for each acre or fraction thereof to the appropriate Bureau land office. A minimum annual rental of \$20 is required. Lessees are required to pay annual rentals at rates specified in the leases and, after production begins, to pay royalties on the coal produced from the leased lands. The minimum royalty rate established by law is 5 cents a ton.

Under the law coal leases are issued for indeterminate terms, subject at 20-year intervals to such adjustment of terms and conditions as the Secretary of the Interior may determine.

Nationwide, the Government received \$9.7 million under the coal-leasing program during fiscal year 1971, of which about \$9.3 million was received from leasing activities in the four States included in our review, as follows:

	<u>Royalty</u>	<u>Bonus received</u>	<u>Other (note a)</u>	<u>Total</u>
Colorado	\$ 423,651	\$ -	\$107,684	\$ 531,335
Montana	9,467	129,954	152,028	291,449
Utah	328,005	6,414	259,312	593,731
Wyoming	<u>385,078</u>	<u>7,412,417</u>	<u>152,058</u>	<u>7,949,553</u>
Total	<u>\$1,146,201</u>	<u>\$7,548,785</u>	<u>\$671,082</u>	<u>\$9,366,068</u>

<sup>a</sup>Includes revenue from filing fees and annual rental payments.

## CHAPTER 2

### RECLAMATION OF FEDERAL LANDS DAMAGED

#### BY COAL-MINING OPERATIONS

We examined into the conditions of Federal lands at 13 mines; 12 of which were subject to reclamation requirements under the terms of Federal leases. There was no significant visible damage to the surface of Federal lands at the five underground mines included in our review. Federal lands at three of the seven strip mines that were subject to Federal reclamation requirements had been restored to the approximate condition of the surrounding area. At two other mines the reclamation work consisted primarily of leveling the tops of spoil banks--piles of earth and other materials which were removed to expose coal deposits--to a width of 25 feet. This was considered acceptable by Survey regional officials. At another mine the spoil banks had been leveled but not to the required 25-foot width. Steep banks existed at the other mine at the time of our visit but, according to a Survey regional official, had subsequently been sloped to an acceptable level.

It appears that most reclamation work at the mining sites we visited was undertaken primarily as a result of reclamation policies established voluntarily by mine operators or the need to comply with State law. In addition, some reclamation work resulted from the Department's limited enforcement of reclamation requirements incorporated into leases issued or adjusted after 1951.

The Department in January 1969 issued regulations setting forth detailed requirements for the reclamation of Federal lands. These requirements are to be incorporated into leases issued or adjusted after that date and, if properly implemented, should provide for improved reclamation and conservation of Federal lands.

Since outstanding leases are adjusted only at 20-year intervals, many leases, however, have not been revised to include the new requirements. These leases do contain broad provisions for the protection of the surface and natural resources, and we believe that the Department should require that lessees comply with these broad requirements.

LAND CONDITIONS AS  
A RESULT OF MINING OPERATIONS

We examined into the condition of Federal lands at 13 selected coal mines in Colorado, Montana, Utah, and Wyoming. We selected five underground mines and eight strip mines which included mines that were in operation at the time of our review and mines that were not. Our observations which follow were limited to visual observations at the time of our visits. We could not determine whether sedimentation and erosion could occur over a long period and could possibly cause surface or groundwater problems.

At the five underground mining operations that we visited, there was no visible evidence of significant damage to the surface of Federal lands. At two mines, the mine entrances were located on non-Federal land and only tunnels were under the Federal land. At the three other mines, the mine entrances were on Federal land. Waste from mining operations had been accumulated in piles on non-Federal lands by the five mine operators. The Survey's regional mining supervisors, who accompanied us on our visits to the mining sites, did not consider that the mine entrances constituted surface damage to the Federal land, even though in some cases mining operations had been suspended or terminated. We were advised by Bureau and Survey headquarters officials, however, that all surface excavations on leased Federal lands, including mine entrances, came within the Department's surface protection responsibility.

At the eight strip mines--seven of which we visited--surface damage to the Federal land consisted principally of steep cliffs and large pits that had resulted from the strip-mining operations and from the stocking in piles of large quantities of earth and other materials that had been removed to expose the coal deposits. At one mine abandoned buildings were left on the land after mining operations had been terminated.

Some of the problems usually associated with strip-mining operations in the eastern part of the United States were not evident at the sites we visited during our review. For example, the seven sites we visited were not located near streams or rivers that could receive direct runoff from

rain or snow and we did not see any visible evidence that acid mine water had destroyed wildlife habitats or had polluted water. Also, because of the semiarid climate of many of the sites visited, we did not note visible evidence that erosion or sedimentation was a significant problem.

Since 1951 leases of Federal lands for the purpose of mining coal or leases adjusted after that date have required the lessees to take such reasonable steps as may be needed to prevent operations on the leased lands from unnecessarily (1) causing or contributing to soil erosion or damage to forage or timber growth on the leased lands or other lands in the vicinity, (2) polluting waters, and (3) damaging crops or improvements of a land surface owner without regard to whether the improvements are owned by the United States or by its permittees or lessees.

The leases also provide that, upon partial or total relinquishment, cancellation, expiration of the lease or at any other time prior thereto, the Government (1) may require the lessees to fill any sump holes, ditches, and other excavations; remove or cover all debris; and, so far as reasonably possible, restore the surface of the land to its former condition and (2) may prescribe the steps to be taken and restoration to be made with respect to the leased lands and improvements thereon. Additional provisions were included in leases issued or adjusted after October 1967 to preclude air pollution and the destruction, damage, or removal of fossils, ruins, or artifacts.

The Survey has not issued guidelines to its regional staff, setting forth the manner in which the requirements contained in the leases issued or adjusted since 1951 should be enforced. We were advised by Survey regional mining supervisors that reclamation work by lessees of Federal lands leased for strip-mining was considered satisfactory by the supervisors if the spoil banks<sup>1</sup> had been leveled to a width of at least 25 feet.

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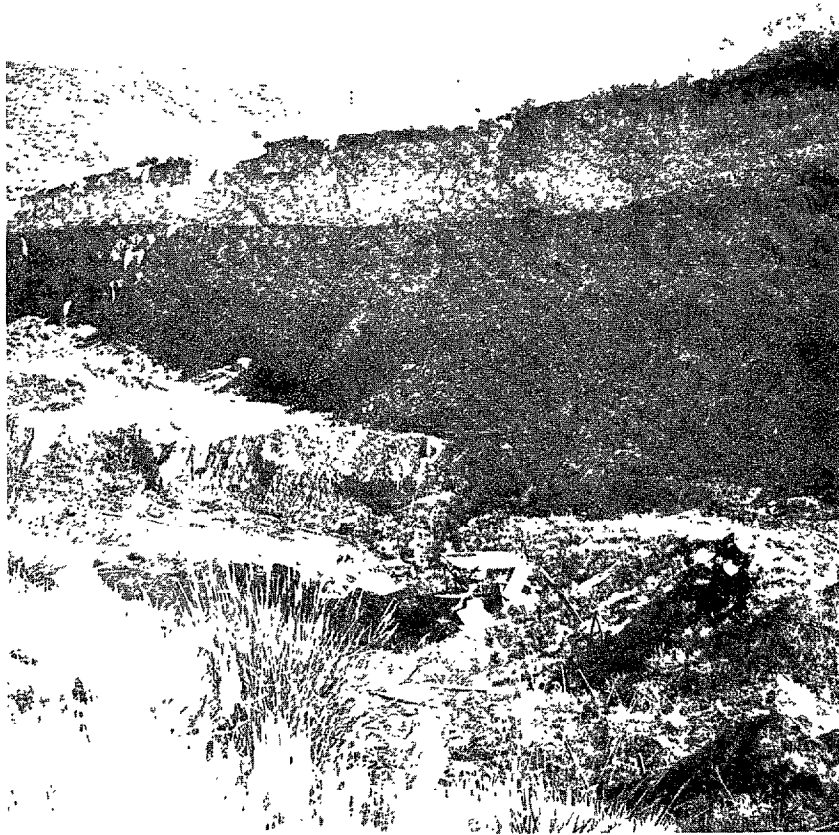
<sup>1</sup>A term common in surface mining to designate piles of earth and other materials which have been removed to expose the natural deposits of coal.

Seven of the eight strip mines included in our review were subject to the foregoing lease requirements during all or part of the time that mining took place. The eight strip-mining operators took the following actions to restore the Federal lands:

- At three mines, spoil banks were leveled, top soil was redistributed, and the area was seeded. The surface of the mined area had been restored to the approximate condition of the surrounding area, and the restoration appeared to have been completed within a reasonable time after completion of mining operations. At two of the mines, the reclamation work exceeded that required by the Survey regional mining supervisors who advised us that the mine operators had done the work under voluntarily established policies which exceeded those required by the Survey. At the third mine more extensive reclamation work than required by the Survey was done to comply with the State reclamation law.
  
- At four mines the reclamation work consisted primarily of leveling the tops of spoil banks. At two of the mines, the spoil banks had been leveled to a width of at least 25 feet but only in those areas where mining operations had been conducted after the 1951 reclamation requirements had been included in the leases. At another mine the spoil banks had been leveled but not to the required 25-foot width. At the fourth mine steep banks existed. Subsequent to our visit to this mine, however, we were advised by the Survey regional mining supervisor that the lessee had sloped the steep banks to an acceptable level.

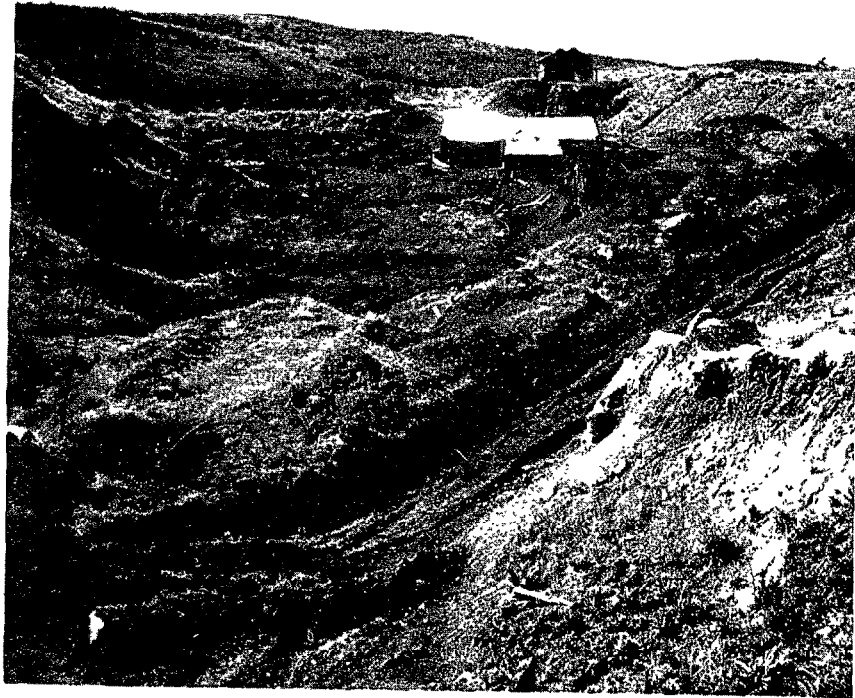
At the remaining mine the operator had not performed any reclamation work because reclamation requirements were not included in the lease when the mining took place.

The following photographs illustrate the condition of Federal land where little or no reclamation has been performed.



Steep cliffs resulting from mining operations on Federal land in Colorado. The Survey regional mining supervisor advised us that some reclamation work had been done on the land subsequent to the time of our inspection.

BEST DOCUMENT AVAILABLE



Abandoned buildings and surface damage on Federal leased land in Colorado where coal-mining operations were suspended in 1968.

BEST DOCUMENT AVAILABLE





View of Federal leased land in Wyoming, showing open pits which remained after removal of the coal. The extent of reclamation required by the Survey can be seen in the upper left center of the photo, which consisted of leveling spoil banks to a width of 25 feet.

BEST DOCUMENT AVAILABLE



Another view of the Federal leased land shown on page 14 also shows open pits which remained after the coal had been mined.

BEST DOCUMENT AVAILABLE

RECENT ACTION BY THE DEPARTMENT TO  
STRENGTHEN ITS RECLAMATION POLICY

The requirements for restoration of lands disturbed by mining operations were strengthened materially when the Department issued new regulations on January 18, 1969.

The new regulations contain procedures designed to ensure that adequate measures are taken to avoid, minimize, or correct damage to the environment and to avoid, minimize, or eliminate hazards to the public health and safety with respect to the exploration for, and the surface mining of, mineral resources on lands leased by the Department. With certain exceptions the new regulations apply to permits issued or renewed and to leases issued or adjusted subsequent to January 18, 1969. For example, the regulations do not cover the exploration for minerals owned by the U.S. Government underlying lands, the surface of which is not owned by the U.S. Government.

The regulations provide that, prior to the issuance of prospecting permits or leases, the Bureau make a technical examination of the prospective effects of the proposed exploration or surface-mining operations upon the environment. The Bureau's manual for implementing the Department's regulations states that the examination is to be made by a team of Bureau and Survey resource specialists, including the Survey's regional mining supervisor, to review topography, geology, soil, hydrology, vegetation, wildlife, ecology, climate, surrounding land uses, actual market demand, feasibility of extraction, and proximity to intensive-use areas or inhabited areas. The examination is to be based on available data in the Bureau offices, supplemented by a field examination if necessary.

The manual contains a checklist of items to be considered during the technical examination. For example, in connection with environmental considerations and reclamation requirements, the list requires consideration of (1) damage to natural scenic, historic, and aesthetic features, (2) possible enhancement of future land use by proper reclamation methods--grading, shaping, filling, revegetation, water impoundment and control--and (3) bonding requirements.

The manual requires the preparation of a report on the technical examination which is to include recommendations concerning (1) prohibiting or restricting operations in the area, if appropriate, (2) requirements for protection of nonmineral resources, (3) reclamation requirements on land which will be damaged as a result of surface exploration or surface mining, and (4) the amount of bond needed to ensure compliance with surface protection requirements and all other stipulations in the permit or lease. These requirements are to be submitted in writing to the applicant before the issuance of a lease. If the requirements are accepted by the applicant, a lease is issued and the requirements are incorporated into the lease.

Before commencing any surface-disturbing operations, the operator must file a plan for the proposed exploration or mining operations with the Survey regional mining supervisor or his authorized representative and must obtain Survey approval of the plan. The regulations state that, before any exploration or mining activities may be authorized, the operator must post a bond sufficient to cover the estimated cost of the reclamation work provided for in the exploration or mining plan. The bond is conditioned upon the faithful compliance with applicable regulations, the terms and conditions of the lease, and the exploration or mining plan as approved, amended, or supplemented.

The regulations state also that the Survey is responsible for supervision of the exploration and mining operations and that permittees and lessees are responsible for submitting reports to the Survey on their operations for each calendar year, including grading and backfilling completed as required by the Survey's approved exploration and mining plan and planting or seeding completed in accordance with the approved plans, and on plans to cease or abandon operations.

Upon receipt of these reports, except for the operations report, the Survey is required to make compliance inspections. For example, a permittee or lessee may submit a report of his intention to cease or abandon operations, together with a statement of the exact number of acres of land affected by his operations, the extent of reclamation accomplished, and other relevant information. Upon receipt

of a report to cease or abandon operations, the Survey is required to make an inspection to determine whether operations have been carried out and completed in accordance with the approved exploration or mining plan.

Under the new procedures, if the Department determines that an operator has failed to comply with (1) the terms and conditions of a lease, (2) the requirements of an exploration or mining plan, or (3) applicable provisions of the Department's regulations, the operator is to be notified of his noncompliance, the corrective action required, and the time limits within which the action must be taken. Failure of the operator to take action constitutes grounds for suspension of his operations by the Survey mining supervisor or for the canceling of the lease and the forfeiting of the performance bond by the operator.

The leases involved in the 13 mines included in our review were issued prior to 1969, and thus the new regulations were not applicable to those leases. As discussed on page 26, considerable time elapses between the issuance of a lease and the commencement of mining operations.

At the time that we completed our review, the regulations issued on January 18, 1969, had not been fully implemented and sufficient time had not elapsed to adequately evaluate the implementation of these regulations. We did note, however, some instances in which the regulations had not been implemented. For example, we noted that the Bureau had not made the required technical examinations for 30 prospecting permits issued from June through December 1969 for Federal lands in Utah and for eight prospecting permits issued in February 1970 for Federal lands in Wyoming.

#### STATE RECLAMATION REQUIREMENTS

Laws have been enacted by various States within the past few years establishing standards and requirements for the reclamation and conservation of areas--regardless of ownership--affected by surface-mining operations. Utah was the only State of the four included in our review that did not have such a law. Although the Department's regulations apply to leases issued or adjusted after January 18, 1969,

the State laws, with one exception, apply to all surface-disturbing operations which take place after the date that the laws were enacted without regard to the ownership of the surface or the coal. It is the Department's policy, however, that, where Federal standards are lower than State requirements, the State standards be followed.

The Colorado Open Cut Land Reclamation Act of 1969 was enacted by the General Assembly of Colorado, effective July 1, 1969. The act states that anyone removing overburden (the earth and other materials which lie above natural deposits of coal) on or after the effective date of the act must first obtain a permit to do so from the Colorado Department of Natural Resources. In addition, the mine operator must post a bond as surety that he will undertake proper reclamation of the land affected by the mining of coal. Also the operator must agree to comply with all the provisions of the State law and all the rules, regulations, and requirements of the Department of Natural Resources of the State of Colorado with reference to the proper reclamation of land affected by the mining of coal by open-cut methods.

The State law sets forth various requirements, such as those relating to grading spoil banks and covering exposed acid-forming material. The law provides that the operator determine the type of reclamation to be undertaken on the land affected by mining, such as reclaiming the land for forest, range crop, horticultural, homesite, recreational, industrial, or other uses. Also the law provides certain standards or requirements for reclamation; however, the type of reclamation may be chosen by the operator. The operator is required to submit an annual report showing the affected area and other pertinent details, such as roads, access to the area, and the reclamation work accomplished. We were advised by a State official that, after receipt of the annual report from an operator, a compliance inspection was made by the State.

The Wyoming Open Cut Land Reclamation Act, which provides for the reclamation and conservation of land subject to surface disturbance by strip-mining, was approved on March 6, 1969. The provisions of this law essentially are the same as those included in the law enacted by the State of Colorado.

An act providing for the reclamation of lands on which strip-mining is conducted was approved by the Legislative Assembly of Montana on March 1, 1967. The act authorizes the Montana Bureau of Mines and Geology to enter into contracts with strip-mining operators that provide for the reclamation of lands on which the strip-mining of coal has been conducted by an operator. As an incentive for a strip-mining operator to enter into such a contract, the law provides for a refund amounting to one half of the reasonable value of the reclamation work performed by the operator during the preceding year.

The contracts contain standard reclamation provisions setting forth certain requirements and procedures to be followed by the operator, such as preventing contaminated drainage into adjoining lands or streams and revegetating lands affected by mining operations where the land is considered plantable.

The contracts are required also to provide that the operators, after completing 12 months of mining operations, submit for approval a reclamation plan to Montana Bureau of Mines and Geology outlining in detail the reclamation work to be undertaken by the operator. With few exceptions the approved reclamation work must be completed satisfactorily within 5 years after the plan has been approved.

In 1969 the Legislative Assembly of Montana passed another law which requires any operator engaged in surface coal mining in an area where the overburden exceeds 10 feet in depth either to enter into a contract with the State to perform reclamation work or to obtain a permit to engage in surface coal mining. The law sets forth specific requirements that must be adhered to by those receiving permits for protection of the environment and for the reclamation of land damaged by mining operations, concerning such matters as grading of peaks and ridges, construction of earth dams, and reseedling of lands damaged by mining operations.

## CONCLUSIONS

Although the Department has incorporated broad reclamation requirements into coal leases issued or adjusted from

1951 to January 1969, Survey has not issued guidelines to its regional staff for enforcing these requirements.

The Department's new regulations issued in January 1969 should, if properly implemented, substantially increase the responsibilities of mine operators for the reclamation of Federal lands damaged by coal-mining operations. These regulations apply only in those cases in which leases have been issued or adjusted after January 1969. The regulations are not applicable therefore to leases issued before January 1969 until they have been adjusted at the end of the 20-year period.

We therefore believe that, with respect to those leases for which the January 1969 regulations are not applicable, the Department, under the broad authority included in leases issued or adjusted after 1951, should increase its efforts to ensure that lessees do an effective job of reclamation to repair damage to the Federal lands which has occurred or may occur in the future.

In view of the Department's policy that, where Federal standards are lower than State standards, the latter be followed, we believe that the reclamation standards imposed by laws enacted by the States of Colorado, Montana, and Wyoming should result in improved reclamation activities of mine operators on Federal lands if the Department requires compliance with these standards.

RECOMMENDATION TO  
THE SECRETARY OF THE INTERIOR

We recommend that, to ensure that lessees of Federal lands for mining of coal do an effective job of reclamation, the Geological Survey be required to issue guidelines and procedures for use by its regional mining supervisors in enforcing the 1951 reclamation and environmental requirements contained in leases until the leases have been adjusted to include the stronger reclamation and environmental requirements established in January 1969.



## CHAPTER 3

### LIMITED MINING OF COAL RESOURCES ON

#### LEASED FEDERAL LAND

There has been relatively little mining of Federal coal deposits, and most lessees apparently have no immediate plans to begin coal-mining operations. In our opinion, the leases do not contain adequate provisions to ensure diligent development of the coal resources and continuous production. The Department has permitted lessees to defer mining of coal resources by issuing leases for indefinite periods having no requirement that coal be mined if the lessees make minimum royalty payments for 1 year in advance.

We were advised by Survey officials that, instead of developing the resources, some lessees apparently had entered into leases in the expectation that the coal would be more valuable at some future date because of technological breakthroughs in developing methods and processes for converting coal to gaseous, liquid, and solid fuels and because of new demands from existing markets and the adoption of new uses for coal.

Although there has been little competition in the past in acquiring Federal leases, two recent coal lease offerings in Wyoming resulted in substantial competition for the leases and in the Government's receiving substantially higher bonus bids--one-time payments for the privilege of obtaining the leases--than had been received in the past. A Survey official expressed the opinion that the lessees intended to use the coal on these lands in connection with a plan to convert coal to gas or oil. If the expected increase in demand for coal materializes in the future, the Government may realize greater bonus bids for its coal deposits if the lands are leased at that time.

#### REQUIREMENTS FOR DEVELOPMENT AND CONTINUED OPERATION OF MINES ON FEDERAL LAND

The objective of the statute authorizing the leasing of Federal lands for mining is to promote the mining of

coal, phosphate, oil, oil shale, gas, and sodium on the public domain. This statute provides that:

"\*\*\* Leases shall be for indeterminate periods upon condition of diligent development and continued operation of the mine or mines, except when such operation shall be interrupted by strikes, the elements, or casualties not attributable to the lessee, and upon the further condition that at the end of each twenty-year period succeeding the date of the lease such readjustment of terms and conditions may be made as the Secretary of the Interior may determine, unless otherwise provided by law at the time of the expiration of such periods. The Secretary of the Interior may, if in his judgment the public interest will be subserved thereby, in lieu of the provision herein contained requiring continuous operation of the mine or mines, provide in the lease for the payment of an annual advance royalty upon a minimum number of tons of coal, which in no case shall aggregate less than the amount of rentals herein provided for. He may permit suspension of operation under such lease for not to exceed six months at any one time when market conditions are such that the lease cannot be operated except at a loss." (Underscoring supplied.)

The statute provides also that court proceedings to cancel and forfeit a lease may be instituted whenever the lessee fails to comply with applicable provisions of the act, the Department regulations, or the lease.

A goal of the Bureau's coal-leasing program is to encourage timely and orderly development of coal deposits and to prevent speculative holding of the reserves without development. The Department's regulations and its leases provide that operations under the leases be continuous except under certain circumstances, such as when operations are interrupted by strikes, the elements, or casualties not attributable to the lessee, or unless the lessee pays a minimum royalty for 1 year in advance, in which case operations may be suspended for that year. The lessee is required to pay an annual rental on the leased lands which is credited

against the royalties as they accrue. In those instances in which the lessee defers development or suspends mining operations, the minimum royalty payable by the lessee generally is equal to the annual rental on the leased lands. Therefore the lease terms relating to diligent development and continued operation of a mine are negated merely by payment of the annual rental, an obligation which the lessee previously has assumed as a condition for obtaining the lease.

On August 9, 1971, the Bureau established the requirement that a clause be included in new leases and adjusted leases requiring the lessee to begin mining coal by the sixth year of the lease term. We were advised by Bureau officials that the purpose of the clause was to stimulate the production of coal on Federal leased lands. This provision does not, however, preclude a lessee from suspending development work or mining operations upon payment of a minimum royalty for 1 year in advance.

In September 1971 we were advised that no leases of Federal lands for mining coal had been awarded or adjusted to include the new requirement for diligently undertaking mining operations; however, Bureau headquarters had instructed one of its field offices to include these new requirements in a lease offering that was to take place in the near future.

Department and Bureau officials have indicated that one way to encourage development of coal resources is to increase rental rates for lease of Federal lands to the point where it is unprofitable for lessees to hold excessive leaseholds for long periods without production. Leases which have recently been issued provide for higher rental rates than those in prior leases; however, sufficient time has not elapsed to determine whether the increase is great enough to be effective.

The law provides that rental rates be fixed by the Secretary of the Interior prior to issuance of the lease but that the rental rates be not less than 25 cents an acre for the first year of the lease; 50 cents an acre for the second, third, fourth, and fifth years; and \$1 an acre for each succeeding year thereafter. In leases issued prior

to 1968, the rental rates generally were the minimum as stated above; from 1968 through June 1970, the rental rate was \$5 an acre in the sixth year and for each year thereafter until coal is mined from the leased lands. In June 1970 the Bureau instructed its field offices that rental rates should be not less than \$1 an acre for each year for the first 5 years of the lease and should be at least \$5 an acre for each year thereafter for all leases entered into or adjusted after that date unless lower rates were approved by the Assistant Secretary, Public Land Management.

On February 3, 1971, the Survey issued new procedures for computing the rental rates applicable to the sixth and subsequent years of the lease term. The new procedures did not affect the existing instructions with regard to the rental rate of \$1 an acre for each of the first 5 years of the lease. The new procedures involve the use of a formula which takes into consideration the thickness of the vein of coal, the relative difficulty of mining, and the quality of the coal.

Examples of rental rates computed by the Survey using the new formula included in the February 1971 procedures include \$2 an acre for the sixth and subsequent years for three lease offerings in Wyoming and \$3 and \$3.50 an acre, respectively, for two lease offerings in Utah. The average thickness of the veins of coal involved in these leases ranged from about 4 to 10 feet. For two other proposed leases of high-quality coal in Colorado, the rental rates computed under the new procedures, however, amounted to \$9.50 and \$13, respectively. The coal veins in these instances were 38 and 39 feet thick.

Thus, under the new formula method of computing rentals, the rates for the sixth and subsequent years are significantly higher than the rate of \$1 an acre provided for in leases issued or adjusted prior to 1968 and in some cases higher than the rate of \$5 an acre provided for in leases issued or adjusted from 1968 through June 1970. Sufficient time has not elapsed, however, since the adoption of the new formula method of computing rentals to evaluate the effectiveness of the higher rentals as a deterrent to lessees holding leases of Federal lands for long periods without production. Moreover most of the leases included in our

review were issued or adjusted prior to 1968 and required rentals of \$1 an acre. The higher rental rates computed on the basis of the new formula will not apply to these leases until some future date when they can be adjusted.

LACK OF MINING OF COAL ON LEASED FEDERAL LANDS

At the present time Federal lands containing large deposits of recoverable coal have been leased, but most lessees are not mining the coal and have not taken action to develop a productive mining operation. According to a Bureau report transmitted to the Assistant Secretary, Public Land Management, on June 18, 1971, about 773 thousand acres of Federal land, containing an estimated 8.6 billion tons of recoverable coal, have been leased for mining. The report points out that 91.5 percent of the total acreage under lease is within nonproductive leaseholds.

At the time of our review, coal was being mined under only 35 of 406 leases in force in the four States included in our review, as shown below.

<u>State</u>	<u>Status of existing coal leases</u>		<u>Total</u>
	<u>Producing</u>	<u>Inactive</u>	
Colorado	17	92	109
Montana	3	12	15
Utah	11	182	193
Wyoming	<u>4</u>	<u>85</u>	<u>89</u>
Total	<u>35</u>	<u>370</u>	<u>406</u>

Coal had never been mined under 297 leases, or 73 percent, of the 406 leases. The Survey regional mining supervisors have advised us that lessees have indicated to them that they plan to initiate mining operations under only eight of the 297 leases within the next 5 years.

We recognize that some lessees may not have had sufficient time to fully develop a mining operation and to begin production. To obtain an indication of the time required to fully develop a mine after a lease is issued, we

discussed the matter with Bureau and Survey officials who were of the opinion that, in the case of most leases, productive mining operations could be started within 5 years after the leases were awarded.

We made an analysis of 72 leases, under which productive mining operations had been initiated, which showed that the elapsed time from the issuance of the lease to the start of production ranged from 13 days to over 18 years and averaged 2 years and 7 months. In some cases production apparently started very rapidly, because the mining companies already had been engaged in mining operations on adjacent lands. Of the 297 leases of Federal lands on which coal had never been mined, 110 leases covering 127,517 acres of Federal land had been in force for 5 or more years.

Generally the coal was being mined by a few large operators who supplied coal for power plants and steel-mill operations and by small operators who produced coal for sale on the local market.

We discussed each of the 297 nonproductive leases with regional Survey officials. These officials told us that they did not have specific knowledge as to why 78 lessees had not mined the coal resources. They expressed the opinion that 158 lessees had acquired the leases to hold the coal as reserves to meet possible future needs of steel-manufacturing industries, power-generating companies, and others. Survey officials expressed the opinion also that mine operators needed a 30- to 50-year coal reserve to justify the necessary investment in mine and plant equipment. Also, these officials expressed the view that 31 lessees had acquired the leases as reserves to be used in the event methods and processes were developed to convert coal into gaseous, liquid, and solid fuels. We were advised that the remaining 30 leases were being held for other purposes including speculative purposes.

The Bureau made a review of the pattern of ownership and of the development of Federal coal resources and submitted a report on the review to the Assistant Secretary, Public Land Management, on June 18, 1971. The report pointed out that the leasing of Federal lands containing coal deposits was growing at an increasing rate. The report states that:

"The reasons for the upsurge of interest in Federal coal reserves are several. First, anti-pollution statutes in many urban areas are requiring the use of low sulfur coal in electric power plants. Much low sulfur coal exists on Federal land. It is expected that the President's proposed legislation which would tax high sulfur fuels will further enhance the attractiveness of the lower-sulfur western coals.

"Second, current and expected increases in the price of oil and gas are prompting many companies to look toward the vast coal reserves of the western U.S. as a primary source of energy. To use these coals, new technologies such as coal gasification, liquification, and solvent refining are being developed.

"It is expected that commercial coal gasification will be a reality within the decade. Many potential gasification sites are located on Federal land. Commercial development of such processes will suddenly and substantially increase the value of the publically-owned coal reserves of the western United States.

"Under these conditions it is advantageous for an energy supplier or consumer to control as much Federal coal as possible."

The report also points out that there is little development of coal resources on Federal leased lands. The report states also that:

"\*\*\* For all public and acquired lands, 91.5% of the total acreage under coal lease is within non-productive leaseholds. If all leases issued since 1966 are excluded from consideration (on the average 3 to 5 years are required to fully develop a mine) the unproductive lease acreage is still almost 90% of all acres leased through 1965."

\* \* \* \* \*

\*\*\* Of the 529 Federal coal leases outstanding in Nov. 1970, 91% are not producing a single ton of coal. Almost 708,000 of the 773,000 acres under coal lease are unproductive. Some of the non-productive leases are over 40 years old and many are over 20 years old."

In commenting on our draft report, the Department, in a letter dated January 25, 1972, stated that two additional reasons for the upsurge of interest in the leasing of Federal coal lands were

- additional coal needed for existing and new coal-burning power plants and
- the desire of applicants to obtain leases before Government policy changes were initiated.



## LIMITED COMPETITION FOR LEASES OF FEDERAL LANDS

Under the Mineral Leasing Act, the Secretary of the Interior is authorized, upon the request of any qualified applicant or on his own motion, to offer land for leasing. In general, an applicant, to qualify for a lease, must be 21 years of age or over, must be a citizen of the United States, and must not hold coal leases or permits covering in excess of 46,080 acres of Federal lands in any one State. When there is sufficient information available for the Government to determine that public lands contain valuable workable deposits of coal, the lands are offered for leasing by competitive bidding to the qualified bidder offering the highest bonus bid--a one-time payment for the privilege of obtaining the lease.

Notice of the offer to lease by competitive bidding is made by publication once a week for 4 consecutive weeks, or for such other period as may be deemed advisable, in a newspaper of general circulation in the county in which the land is located. Also we were advised by a Bureau official that notices of lease offerings are mailed to persons and firms on a general mailing list.

Our review showed that generally there had been little competition for Federal coal lands offered for lease. The following tabulation summarizes the extent of competition and the range of bonuses received for the 215 leases that were in force on April 1, 1970, in the four States included in our review.

<u>Number of bids</u>	<u>Number of leases</u>	<u>Percent of total</u>	<u>Range of bonuses received (amount for each acre)</u>
1	163	72	\$0 to \$32
2	35	15	1 to 100
3	13	6	1 to 53
4	3	1	9 to 51
5	3	1	13 to 91
6	2	1	31 to 166
(a)	<u>8</u>	<u>4</u>	(a)
Total	<u>227<sup>b</sup></u>	<u>100</u>	

<sup>a</sup>Data not available on the number of bids or the range of bonuses.

<sup>b</sup>The 215 competitive leases were initially awarded as 227 leases but were consolidated.

Bureau and Survey officials advised us that it was their opinion that the lack of competition on Federal coal lease offers was due primarily to the lack of a suitable market. As stated on page 27, the only markets for western coal reserves at this time are a few power-generating plants, steel-mill operations, and local markets.

Prospects for the economical conversion of coal to gas and oil within the near future apparently have increased the competition for Federal coal reserves, as evidenced by two recent Federal coal lease offerings in Wyoming. Bids were received from nine bidders for one lease and from five bidders for the other lease. Bonus bids of \$505 and \$441 an acre, respectively, were made by the two successful bidders. A Survey official expressed the opinion to us that the two successful bidders intended to use the coal reserves on these lands for conversion into gaseous, liquid, and solid fuels.

#### CONCLUSIONS

Although the legislative objective of the coal-leasing program is to promote the mining of coal on public lands, only limited mining has been conducted on the large Federal coal reserves on the Federal lands that have been leased by the Department, and it appears that few of the lessees have plans to initiate mining operations in the near future. Lessees are not required to mine coal on the federally leased lands if they make minimum royalty payments for 1 year in advance.

According to Bureau officials, some lessees have acquired leases to hold the coal as a reserve to meet possible future energy needs or in expectation that the coal will be more valuable at some future date.

The Department recently has taken action with regard to issuing new leases and adjusting existing leases, which is intended to stimulate timely and orderly development of Federal coal resources, including the establishment of higher rental rates and new requirements for diligent development of coal resources. The extent to which coal is produced from Federal lands is related, in our opinion, more to the demand for coal than to the terms and conditions under which Federal lands are leased.

Although the Department in the future could require mining of coal deposits on leased Federal lands within a specified period and could make it more costly to hold leased Federal lands without mining the coal deposits, we believe that such action would not necessarily result in a substantial increase in coal production until sufficient demand for coal develops to enable the mine operators to profitably dispose of the coal. Rather, such action could discourage individuals and companies from entering into leases or from continuing to hold leases where there are no plans for development of the deposits in the near future.

The requirements established on August 9, 1971 (see p. 24), concerning the mining of coal from federally leased lands had not been included in any Federal leases at the time we completed our review; however, we question whether these requirements would be effective in stimulating timely mining of Federal coal deposits and whether they can provide an adequate basis for terminating leases when timely production does not occur. For example, leases issued under the requirements would contain a clause requiring diligent mining of coal deposits; however, we were advised by a Bureau official that a lease still would provide that operations be suspended if the lessee pays a minimum royalty for 1 year in advance.

Although we recognize the need for coal producers to acquire sufficient reserves to supply their reasonable needs, we believe that the higher rentals to be set forth in new and adjusted leases might discourage some lessees from holding leases when they have no immediate plans for mining the coal deposits. These new leases, however, will be issued for indeterminate periods and can be adjusted only at 20-year intervals. Presently the Bureau has no way of knowing how effective the higher rental rates will be in encouraging the lessees to mine the coal deposits or whether they will result in the lessees' relinquishing leases in those cases in which they have no plans for mining coal.

We therefore believe that the lease terms should provide for the timely development of coal deposits. The Department could then initiate court proceedings to terminate a lease, as provided for in the Mineral Leasing Act, if the lessee does not undertake development and production within

a reasonable time. Although the termination of some non-productive leases would result in a loss of rental revenues, we believe that the mere leasing of Federal lands is not accomplishing the objective of the leasing program or the intent of legislation authorizing the program. Moreover, if the potential increase in demand for coal materializes, the Government could receive significantly larger revenues from leasing its lands through the receipt of increased bonuses.

RECOMMENDATIONS TO  
THE SECRETARY OF THE INTERIOR

We recommend that the Secretary of the Interior consider discontinuing the practice of issuing leases for Federal lands that permit lessees to defer or suspend mining operations on the lands by the payment of a minimum royalty for 1 year in advance unless lessees can justify that operations should be deferred or suspended.

## CHAPTER 4

### IMPROVED PROCEDURES NEEDED FOR DETERMINING ROYALTIES

The Government has not received an equitable royalty for coal produced on Federal lands because (1) royalties have been computed on the basis of a fixed amount a ton, which have not taken into account pertinent factors, such as variances in costs of extracting the coal and in coal selling prices, and (2) increases in royalty rates have not been applied to outstanding leases on a timely basis since the law permits adjustments in the terms and conditions of Federal leases only at 20-year intervals.

In February 1971 the Survey's policy of calculating royalties on the basis of a fixed amount a ton was changed to provide for royalties to be calculated on a basis of a percentage of value, which, in effect, gives some consideration to the factors cited above. This change, however, will affect only leases issued or adjusted after February 1971 and will not affect existing leases until their terms are adjusted at the expiration of the 20-year periods.

### VALUE OF COAL NOT CONSIDERED IN ESTABLISHING THE ROYALTY RATE

Prior to 1964 the terms of the Federal coal leases provided for royalty rates which generally ranged from 10 to 15 cents a ton. For new leases and leases adjusted after that date, the royalty rates applicable to underground mining of low-grade coal (lignite) and coal used primarily as fuel for steam power plants were increased to 15 cents a ton for the first 10 years and to 17-1/2 cents a ton thereafter. A few leases involving high-grade coal provided for a royalty of 20 to 22-1/2 cents a ton. For coal which was to be mined by strip-mining methods, the royalty rates were 2-1/2 cents a ton greater than the rates for underground mines.

In February 1971 the Survey established a new method for computing royalties. The method provides that royalties for new or adjusted leases be computed on the basis of a percentage of the value of coal mined. The percentage for coal extracted by (1) strip-mining is 5 percent and (2) underground mining is determined by the use of a formula which

prescribes rates ranging from 2-1/2 to 4 percent--depending on the depth of the mine.

We were advised by a Survey official that the formula for computing royalties was an attempt to give consideration to the cost of extracting coal by providing (1) a low rate for underground mining of coal that is mined at great depth, which is costly to mine, and a higher rate for coal that is mined near the surface, which is less costly to mine, and (2) a higher rate for strip-mining which is less costly than underground mining.

The sales prices of coal produced under the leases included in our review ranged from \$1.50 to \$10.49 a ton. The royalty rates, however, were based on a fixed amount for each ton, and this price variation was not a factor considered in establishing rates. Royalty payments under these leases will continue at the inequitable rates until the 20-year-adjustment period, and then the royalty provisions of the leases can be revised to provide for the payment of royalties on the basis of a percentage of the value of coal sold rather than a fixed amount for each ton.

The following example illustrates the inequity of providing for the payment of royalties on the basis of a flat rate for each ton of coal sold.

The Government received royalties at 15 cents a ton for about 300,000 tons of coal produced under one lease in Colorado and for about 500,000 tons of coal produced under another lease in Colorado during the period January 1, 1968, through March 31, 1970. On the basis of estimates by Survey officials, the average selling price of the coal produced under one lease was about \$9 a ton and \$3.30 a ton under the other lease. We estimate that, had the royalties been computed on the basis of a percentage of value established by the Survey in February 1971, the lessee who sold coal for \$9 a ton would have paid a royalty of 31-1/2 cents a ton and that the lessee who sold coal for \$3.30 would have paid a royalty of 16-1/2 cents a ton. The resultant increase in Federal royalty revenue would have been about \$58,000. We believe that the payment of royalties at the same rate a ton under each of the leases is not equitable to either lessees or the Federal Government.

## INFLEXIBLE ROYALTY RATES

A report prepared by the Geological Survey in 1957 on a review of royalty rates and terms pointed out that:

"Compared with simple percentage royalty, the advantage of tonnage royalty is ease of administration where a product is relatively uniform in quality and value, and a sensitive system is unwarranted for the term of the lease. The disadvantage of straight tonnage royalty over a longer period, or with a variable product, is that it encourages selective mining and it penalizes the operator in depression, the owner in prosperity or inflation."

Following is an example of a case in which no immediate benefits accrued to the Government from the increased royalty rates because the rates are not applicable to existing leases until they are adjusted at the expiration of the 20-year periods.

A lease, issued on June 1, 1956, of Federal coal lands in Wyoming provided for payment of royalties at the rates of 10 cents a ton for the first 10 years, 12-1/2 cents a ton for the next 5 years, and 15 cents a ton thereafter. If the royalty rate of 17-1/2 cents a ton established in 1964 for new and adjusted leases involving this type of coal-mining operation could have been applied to the production under this lease after 1964, the Government's royalties would have been substantially increased. For example, if the higher royalty rate could have been applicable to the production under this lease during the period April 1, 1968, to March 31, 1970, the Government would have received additional royalties of about \$115,000.

The following table shows the average royalty for each ton paid to the Government for coal mined on Federal leased lands in the four States included in our review during fiscal year 1971.

	<u>Coal mined</u>		<u>Royalties</u>		
	<u>Tons</u>	<u>Value</u>	<u>Average value for each ton</u>	<u>Total</u>	<u>Average royalty for each ton</u>
Colorado	2,645,630	\$18,153,384	\$6.86	\$423,651	\$0.160
Montana	89,427	260,223	2.91	9,467	.106
Utah	2,186,698	13,137,793	6.00	328,005	.150
Wyoming	2,814,745	10,339,244	3.67	385,078	.137

We estimate that the Government would have received increased royalties of about \$108,000 in fiscal year 1969 if the minimum royalty rates established in 1964--15 cents a ton for coal produced in underground mines and 17-1/2 cents a ton for coal produced in strip mines--could have been applied to the coal mined on the leased lands in the four States. This difference between the royalties received and those that would have been received on the basis of the 1964 rates illustrates the effect of the statutory provision authorizing the Secretary to unilaterally adjust the lease terms only at 20-year intervals.

### CONCLUSIONS

We believe that royalty payments have not been established on a fair basis. We believe also that the Department's new method of computing royalties on the basis of the value of coal mined which, in effect, gives some consideration to the cost of extracting the coal and coal selling prices is an improvement over the prior method. All leases issued or adjusted prior to February 1971, however, provide that royalties be computed on the basis of a fixed amount a ton. These leases provide also that the time to adjust and fix royalties be at 20-year intervals from the date of the issuance of the leases.

As pointed out in chapter 2, the provisions for restoration of lands disturbed by mining operations established in January 1969 will not be incorporated into the outstanding leases until they have been adjusted at the end of the 20-year periods. In chapter 3 we pointed out that new rental rates established by the Survey in February 1971 will not be applicable to existing leases until they have been adjusted at the end of the 20-year periods.



We therefore believe that the Department should give consideration to initiating a study to determine the desirability of seeking a change in the law to permit the inclusion in future leases of provisions authorizing the adjustment of the royalty rates and other lease terms, such as those providing for restoration of lands, more frequently than at 20-year intervals. This study should consider not only the effects that such a change would have on the royalties and rentals and on the improvements in the reclamation of Federal lands affected by mining but also the effect it would have on the lessee's ability to continue mining operations on a profitable basis, particularly in cases in which the lessee has entered into long-term agreement to supply coal at a fixed price.

RECOMMENDATION TO  
THE SECRETARY OF THE INTERIOR

We recommend that the Secretary of the Interior initiate a study to determine the desirability of seeking a change in the law that would permit the adjustment of royalty rates and other lease terms more frequently than at 20-year intervals.

## CHAPTER 5

### AGENCY COMMENTS

By letter dated January 25, 1972, the Director of Survey and Review furnished us with the Department's comments on our draft report. (See app. II.) The Department did not comment on the recommendations in our draft report; however, it stated that, because of the energy crisis and the demand for environmental protection, management of the Federal coal reserves had become a high-priority program and currently was under review. The Department stated that it was exploring a variety of alternatives in management procedures, including diligent development and minimum production requirements, escalating rentals, minimum development requirements, bidding procedures, a schedule of production plans, lease term adjustment periods, and other provisions that would aid in the management of the program.

The Director subsequently informed us that our recommendations would be considered by the Department in its review of the coal-leasing program. The Department, in its letter of January 25, 1972, stated that:

"We agree that the GAO has identified some of the most pressing issues before the Department concerning our coal resource management program. However, we are concerned that not all aspects of our minerals and energy resource management programs--the coal leasing programs being one part--are sufficiently discussed to reveal the interrelationships that exist and that are being considered totally by the Department."

The Department did not elaborate on the interrelationships that existed and that were being considered totally by the Department. We were subsequently advised by the Director of Survey and Review that, to devise solutions to the problems raised in this report, the Department could not limit its consideration to only the coal-leasing program.

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With regard to our discussion in the report on the inequitable royalties received for coal produced from Federal lands (see ch. 4), the Department stated that:

"In general, the Department does not limit its evaluation and fair-market value to a royalty base alone. We use a total resource evaluation, rental, royalty and bonus bid as well as consideration of the method of bidding (i.e., sealed vs. oral auction) to assure the receipt of fair-market values."

Although we recognize that the Department receives revenues for its coal resources other than royalties, we question whether the inequities in the royalty rates are mitigated through the receipt of rentals and bonuses.

With respect to bonuses the Government does not receive a bonus in the event a preference-right lease is issued. About half the leases in force in the four states included in our review were preference-right leases for which the Government had not received any bonuses. As pointed out on page 30, there has been a general lack of competition for competitively awarded coal leases in the past, and only in recent lease offerings has the Bureau received large bonuses for its leases.

The Department's records did not, however, indicate that the Department had considered the inequities in the royalty rates in establishing the minimum acceptable bonus bids. Moreover the bonuses reflect judgments made prior to the award of leases and therefore cannot take into account variances in coal prices that may occur during the next 20 years.

With respect to rental payments, it should be noted that rentals for any year are credited against the royalties as they accrue for that year. Thus rentals are received from only nonproductive or very low productive leases. It should be noted also that rentals, except for a few recently issued leases, are not based on consideration of factors, such as variances in the cost of extracting coal and in coal prices, and cannot be adjusted except at 20-year intervals.

The Department pointed out that our report limited its discussion to coal permits and leases on Federal lands but that the Department, in development of its Federal coal resource management program, considered other than federally owned coal resources. The Department furnished us with tables used in its resource management program, which it believes would add perspective to our discussion of the Federal coal-leasing program. The tables are included in appendix II of this report.

The tables furnished do not, however, provide comparisons of (1) the total acreage of Federal land leased for coal-mining purposes with the total acreage of other land in the four States leased for coal-mining purposes, (2) the extent of coal reserves on leased Federal land with the reserves on other leased lands in the four States, and (3) the number of productive and nonproductive Federal leases with the number of such leases of other land in the four States.

We believe that, in the absence of such data, the tables furnished by the Department do not present an adequate basis for evaluating the Department's program for developing coal resources on Federal lands in relation to what is being accomplished in the development of State and private coal resources.

## CHAPTER 6

### SCOPE OF REVIEW

Our review of the Department of the Interior's program for leasing Federal lands containing coal deposits in the States of Colorado, Montana, Utah, and Wyoming was made at the Regional Offices of the Branch of Mining Operations, Conservation Division, Geological Survey at Denver, Colorado; Billings, Montana; and Salt Lake City, Utah; at the Bureau of Land Management State offices in Denver, Colorado; Billings, Montana; Salt Lake City, Utah; and Cheyenne, Wyoming; at the headquarters offices of the Bureau and Survey in Washington, D.C.; and at the appropriate State agencies in the States of Colorado, Utah, and Wyoming.

We examined pertinent laws and regulations which governed the leasing of Federal coal lands, including State reclamation requirements, and the determination of royalties due from the leased lands and examined into the conditions of Federal lands at 13 coal mines in the States of Colorado, Montana, Utah, and Wyoming.

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JERRY T. VERKLER, STAFF DIRECTOR

# United States Senate

COMMITTEE ON  
INTERIOR AND INSULAR AFFAIRS  
WASHINGTON, D.C. 20510

11 February 1970

Mr. Elmer B. Staats  
Comptroller General  
of the United States  
Washington, D.C. 20548


Dear General Staats:

The Department of the Interior is responsible for a substantial coal leasing program, important not only from the standpoint of a return to the public from public lands but also from the point of view of conservationists.

Recently, conservationists have expressed concern to me over terms of leases. I also have been told that the bidding arrangements tend to stifle competition, the lease terms should be strengthened to meet conservation needs and the royalty rates need to be reviewed to assure an equitable return to the Federal government and payments in lieu of taxes to local governments.

I would appreciate your making an appropriate review starting with sales currently under consideration or being advertised and going back to sales made since 1 January 1968. In this connection, please include Department regulations, memoranda and pertinent instructions including an analysis of the effect of changes made. In terms of sales, please include any in Montana plus appropriate sales in the three leading public land coal producing states.

Very truly yours,



Lee Metcalf  
Please Mark

BEST DOCUMENT AVAILABLE



United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

Mr. Max Hirschhorn  
Associate Director  
Civil Division  
U.S. General Accounting Office  
Washington, D.C. 20548

JAN 25 1972

Dear Mr. Hirschhorn:

The Department has reviewed your proposed report to Senator Lee Metcalf on the administration of the Department of Interior's Coal Leasing Program. To assist you and our staff, we have worked closely with your auditors concerning the background statistics and historical perspective, concluding this exchange on January 21, 1972.

In face of the energy crisis, increasing pressure has been placed on coal within the past few years to reestablish its position as a major contributor to the nation's energy needs. This, coupled with the identified demand for environmental protection, management of the Federal coal reserves has become a high priority program of the Interior Department. In response to this, we are evolving a viable coal resource management program and numerous issues still are in the process of being reviewed and resolved within the Department.

The Department's mineral management program includes the assurances of (1) orderly and timely resource development, (2) protection of the environment, and (3) the receipt of fair-market value for leased resources.

Currently, the Department is exploring a variety of alternatives in management procedures, including diligent development and minimum production requirements, escalating rentals, minimum development requirements, bidding procedures (sealed bidding vs. oral auction), schedule of production plans, lease term adjustment periods and other criteria that will aid the resource manager in coal lease and permit management decisions.

The Mining and Minerals Policy Act of 1970 provides the Department additional authority to address these problems. Further, enactment of the Mineral Leasing Act of 1971 (S-2726) will assist the Department's attainment of the Nation's mineral resource goals.

We suggest that the report should recognize that in addition to the two reasons stated for the upsurge of interest in leasing of Federal Coal Reserves the Department considers two additional items affecting the increase of applications. They are:

- additional coal needed for existing and new coal-burning powerplants, and
- desire of applicants to obtain leases before Government policy changes are initiated.

Both these items can be supported in fact and through experience.

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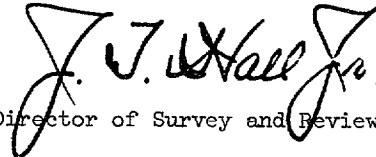
In general, the Department does not limit its evaluation and fair-market value to a royalty base alone. We use a total resource evaluation, rental, royalty and bonus bid as well as consideration of the method of bidding (i.e., sealed vs. oral auction) to assure the receipt of fair-market values.

Also, the draft report limits its discussion to coal permits and leases on Federal lands. The Department in development of a meaningful Federal Coal Resource Management Program considers coal other than Federally-owned (i.e., State and private). We feel that the addition of two tables to the report would add the perspective we use in our overall resource management program. Table 1 illustrates some of the acreage leased under known respective ownership. Table 2 illustrates the percentage of Federal coal production to total production in the four States discussed in the report. Both tables are attached.

We agree that the GAO has identified some of the most pressing issues before the Department concerning our coal resource management program. However, we are concerned that not all aspects of our minerals and energy resource management programs--the coal leasing programs being one part--are sufficiently discussed to reveal the interrelationships that exist and that are being considered totally by the Department.

We appreciate the opportunity to comment on the material being provided Senator Metcalf.

Sincerely yours,

  
Director of Survey and Review

Enclosure

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APPENDIX II

Table 1

Known Acres Under Lease or Permit

<u>State</u>	<u>Acres State Land</u>	<u>Acres Federal Land</u>	<u>Acres Indian Land</u>	<u>Classified Coal Acres</u>
<u>LEASES</u>				
Colorado	250,000	122,040	19,452	4,059,158
Montana	57,537	31,846	-	11,459,070
Utah	86,726	267,418	-	1,695,079
Wyoming	<u>717,986</u>	<u>178,910</u>	-	<u>7,960,946</u>
Subtotal	1,112,249	600,214	19,452	25,174,263
<u>PERMITS</u>				
Colorado	-	35,756	-	-
Montana	-	31,231	394,369	-
Utah	-	166,407	-	-
Wyoming	-	<u>181,149</u>	-	-
Subtotal	-	414,543	394,369	-
Total leases and permits	1,112,249	1,014,757	414,021	
% of total	43.8	39.9	16.3	

Land grant railroads are major lessors in Colorado, Montana and Wyoming. The number of acres under lease is unknown. There is also an unknown amount of private land under lease.

Table 2

COAL PRODUCTION

Fiscal Year 1971

<u>State</u>	<u>Federal Production</u>	<u>Total Production</u>	<u>% Federal</u>
Colorado	2,646,000+	6,048,000+	44
Montana	89,000	3,206,000	3
Utah	2,187,000	5,036,000	43
Wyoming	<u>2,815,000</u>	<u>7,946,000</u>	<u>35</u>
	7,737,000+	22,236,000+	35

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