CHAPTER 9

Federal Coal Lease Management

Contents

List of Tables

List of Figures

CHAPTER 9

Federal Coal Lease Management

Legal Framework and Policy

The Federal Government has both proprietary and sovereign responsibilities for Federal lands. A proprietary responsibility to manage the publicly owned lands and natural resources to meet the Nation's needs for energy, minerals, timber, agricultural production, and recreation while ensuring a fair return on public resources; and a sovereign responsibility to encourage and regulate commerce while at the same time protecting and conserving the natural heritage. The statutes and policies providing the framework of these Federal responsibilities for the management of Federal coal resources are reviewed below.

Historical Development of Federal Land Policies

Lands owned by the Federal Government are either: 1) public domain lands, acquired by cession, treaty or purchase from other sovereign nations; or 2) acquired lands purchased by the Government from private owners after the lands were made part of the Union. By 1867, approximately 1.8 billion acres of land had been added to the public domain through a series of purchases and treaties. Most of these public domain lands were west of the Mississippi River, Figure 40 shows the distribution of federally owned lands in the conterminous 48 States in 1976.

Federal land policy from the time the Nation gained independence through the end of the 19th century had five objectives: 1) to produce revenue for the Government; 2) to facilitate settlement and growth in the various regions; 3) to reward war veterans; 4) to promote education and charitable institutions; and 5) to encourage the construction of internal improvements, e.g., railroads, roads and canals to promote transportation and commerce.

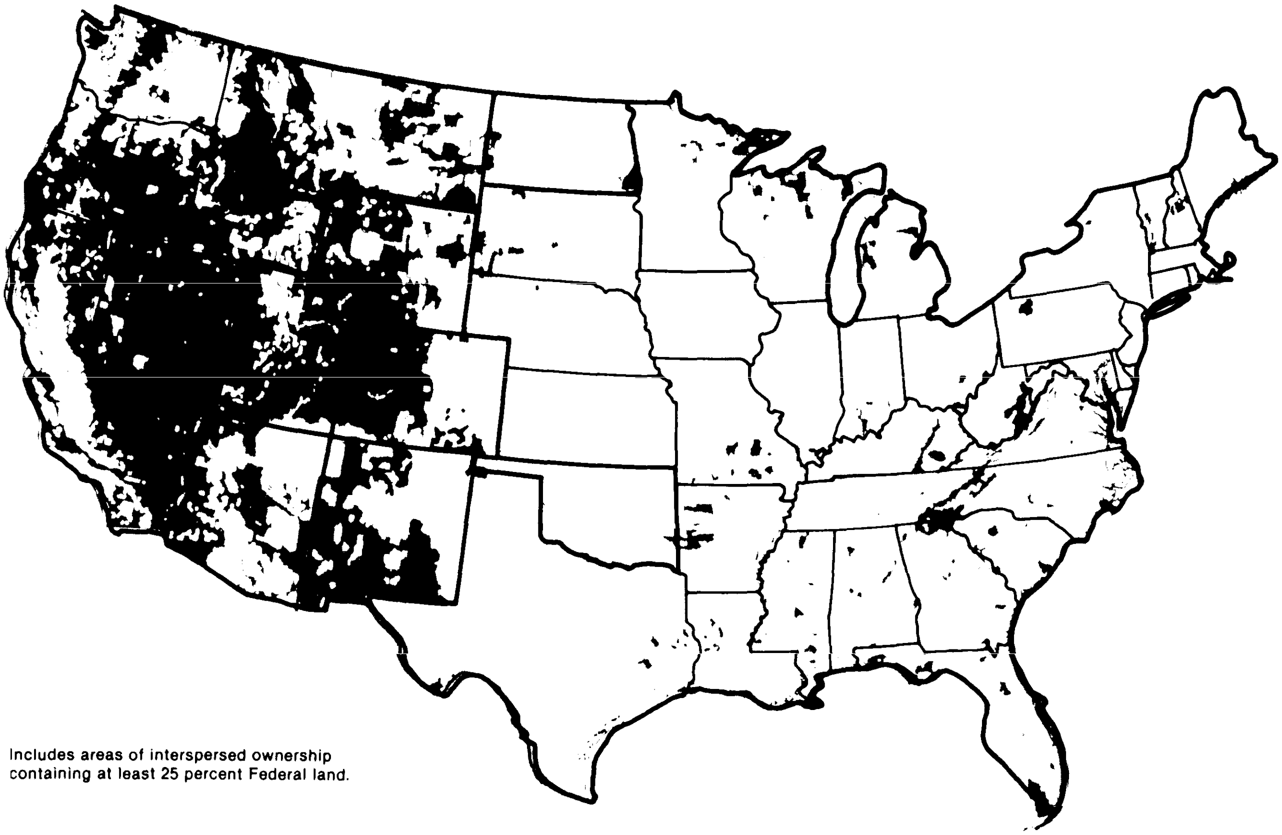
Federal land policy has historically been aimed at disposing of Federal land to private interests through a number of devices including sales, military warrants, preemption, homesteading, and direct grants to States and railroad companies. Through each of these mechanisms, vast areas of the public domain were transferred to private ownership. Those areas that were less favorable for economic use during the period of disposal of public lands were largely retained by the Federal Government, and today constitute the major part of the lands managed by the Bureau of Land Management (BLM).

The intermingled landownership patterns that are the legacy of earlier public lands policies in the West have a direct and significant impact on the management of Western Federal coal lands today. Two aspects, in particular, created land ownership problems for the development of Federal coal lands: 1) checkerboard land grants made to the transcontinental railroads: and 2) severed estates, the separation of surface ownership from subsurface mineral ownership.

Railroad Land Grants.—Over 94 million acres of Federal lands were given to the railroads directly as railroad land grants. An additional 37 million acres were granted to the States for their use to encourage rail development within their boundaries. Figure 41 shows the location of these railroad grants.

Railroad grants were awarded on odd-numbered sections on either side of the proposed right-of-way, with even-numbered sections retained in public ownership. This resulted in what is called a "checkerboard" ownership pattern and still influences the development of Western coal, particularly in areas of North Dakota, Montana, Wyoming, and in New Mexico where the transcontinental railroads were granted lands under the Pacific Railroad Act. Many railroads sold

Figure 40.–Principal Federal Landholdings in the Conterminous United States (1976)



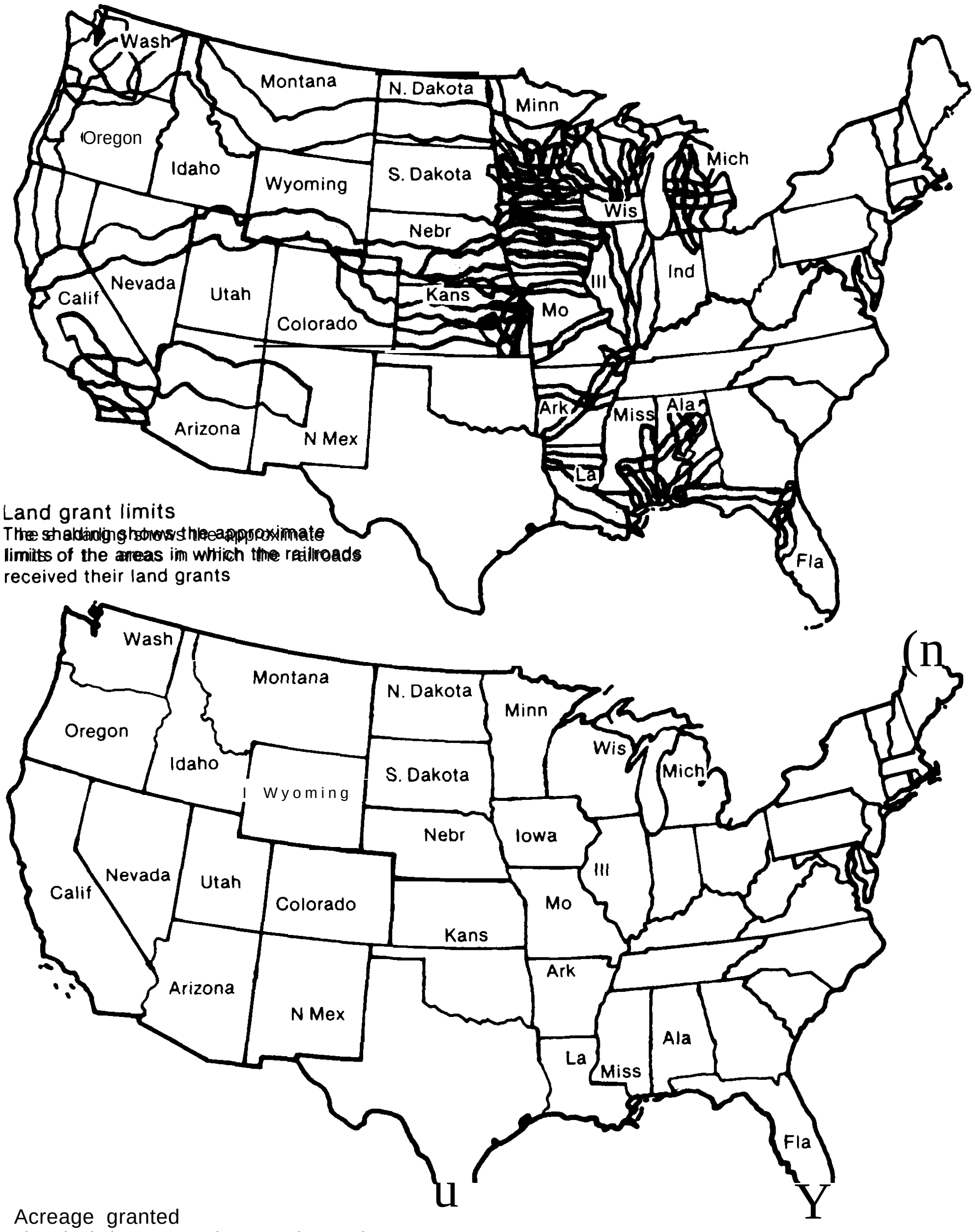
SOURCE: U.S. Geological Survey, Special Maps Branch, 1977

their grants both to encourage settlers and to generate revenues to finance construction. A substantial amount of railroad land grants underlain with valuable coal deposits remains in railroad ownership today.

Surface Ownership and Mineral Interests.— The early 20th century policy of retaining Federal ownership of subsurface mineral rights while granting surface ownership to private parties subsequently created problems for both parties of interest.' The values to the surface owner are in use of the land for grazing, agriculture, recreation, timber, or other surface activities. Mining, on the other hand, frequently involves surface disturbance and can interfere with the surface owner's use of the land. In large strip mines, the surface landowner could be displaced from the property for as much as 30 to 40 years over the life of the mine. Moreover, even after mining, reclamation may not fully restore all of the land's previous characteristics. Under law, mining is considered the dominant land use; the surface owner is compensated for any damages to or loss of buildings and other improvements on the land disturbed by mining. Large quantities of Federal coal may lie below lands whose surface is privately owned. Achieving an equitable balance between the interests of the surface owner and the interest of the public in making coal resources available for development is often a contentious and difficult administrative problem in the Western coal regions. Section 714 of the Surface Mining Control and

NOTE: Footnotes for this chapter are found on pp. 265-269.

Figure 41.— Federal Land Grants for Railroads



Acreage granted
The shaded areas are in proportion to the acreage received by the railroads. They do no show the exact location of the granted lands, which in general formed a checkerboard pattern.

SOURCE. Bureau of Land Management.

Reclamation Act of 1977 (SMCRA)[2] bars the leasing of Federal coal under certain privately held lands unless the surface owner consents to the lease. Section 714 does not apply to existing leases and preference right lease applications (PRLAs)[2] which cover over 200,000 acres of privately owned surface land. Table 73 shows the surface ownership of Federal coal leases in Western coal States.

Reforms Under the Mineral Leasing Act of 1920

Before 1920, Federal coal lands were sold under the authority of the 1873 Coal Lands Act.[3] Sales were limited to 160 acres for individuals and an association could purchase up to 320 acres. The enactment of the Mineral Leasing Act converted the policy of sale of coal land to a policy of leasing rights to explore, develop, and remove coal and other fuel and fertilizer minerals.’

Under the 1920 Act, the Secretary of the Interior could issue prospecting permits that entitled the permittee to the exclusive right to prospect for coal in areas with no known coal deposits. The permits were converted into preference right leases if the permitters could demonstrate the discovery of coal in commercial quantities.

Under the provisions of the 1920 Act, Federal lands containing known commercial coal deposits were divided into leasing tracts and leases were awarded competitively to the highest bidder for a cash bonus,

The Mineral Leasing Act provided for leases to be issued for an indeterminate period so long as the lessee could demonstrate diligent development and continuous operation of the lease. Royalties were originally set at not less than 5 cents/ton of coal and annual rentals could not be below 25 cents, 50 cents, and $1.00/acre for the first, second through fifth, and sixth through 20th years, respectively. The leases were subject to readjustment of terms and rentals and royalties at the end of each 20-year period after issuance.

1971 Moratorium on Coal Leasing

Between 1920 and 1970, Federal coal was virtually leased on demand, i.e., wherever and whenever anyone requested a lease sale or permit, In 1970, a study conducted by BLM found that although the amount of leased Federal coal had increased dramatically in the previous decade, coal production had significantly declined in comparison to the amount of coal under lease. ’ This study ultimately led

Table 73.—Surface Acreage of Leases and PRLAs by State and by Surface Ownership: Sept. 30, 1980

State	Number of leases	Total acres	Federal lands— BLM	FS	Other	Native American	State	Private
Colorado	127	126,875	45,773	22,589	0	0	0	58,498
Montana	22	37,445	1,225	80	0	0	0	36,141
New Mexico	29	44,761	20,047	0	0	9,148	7,086	8,478
North Dakota	18	17,504	0	0	0	0	0	17,504
Utah	204	279,654	187,993	50,102	0	0	28,108	13,450
Wyoming	98	217,835	93,854	4,440	1,324	0	1,840	116,355
Total	498	724,074	348,892	77,211	1,324	9,148	37,034	250,426

State	Number of PRLAs	Total acres	Federal lands BLM	FS	Other	Native American	State	Private
Colorado	37	82,911	23,279	1,203	0	0	0	58,306
Montana	4	14,673	9,917	0	1	0	0	4,756
New Mexico	26	75,509	55,229	0	2	6,101	0	14,180
Utah	21	68,586	54,076	13,609	2	0	40	861
Wyoming	82	138,275	34,325	8,927	1	1,080	923	93,239
Total	170	379,954	176,826	23,739	6	7,181	963	171,342

NOTE: Details may not add to total due to rounding.

SOURCE. U.S. Department of the Interior, Bureau of Land Management, Off Ice of Coal Management, *Automated Coal Lease Data System,* Sept. 30, 1980.

to an informal moratorium on further leasing of Federal coal in 1971. In 1973 the moratorium was formalized by secretarial order but modifications provided for new leases to maintain existing mines or to supply near-term production to satisfy existing market demands.[6] The Department of the Interior (DOI) immediately began developing an improved, long-term coal leasing program.

Meanwhile, congressional hearings on coal leasing (1972-74) focused on whether Federal coal leases were being held for speculation and whether enforcement of lease conditions of diligent development and continued operation were ineffectual.[7] As a result of the hearings, legislation amending the 1920 Mineral Leasing Act eventually passed over President Ford’s veto in August 1976.[8] The amendments included provisions limiting the holding of Federal leases without production.

Energy Minerals Activity Recommendation System (EMARS)

While Congress was considering changes to the Mineral Leasing Act in 1975, DOI announced a new coal leasing program, EMARS, which involved the industry more directly in the tract selection process.[9] Instead of DOI identifying the areas eligible for leasing or offering leases in response to specific sale requests, as was the procedure under the 1920 Mineral Leasing Act, the EMARS procedure was an integrated planning process for lease sales that involved annual nominations for coal leasing areas by the industry and the public, The program was opposed by the western Governors and agricultural interests, and environmental groups. In 1975, the Natural Resources Defense Council (NRDC) sued DOI for insufficiently describing the EMARS program and its potential consequences in the environmental impact statement (EIS).

Two years later, the District Court for the District of Columbia, in NRDC v. Hughes, found the EMARS programmatic EIS inadequate under the National Environmental Policy Act of 1969 (NEPA). The EIS failed to consider the impacts of a no-action alternative of not establishing a new leasing program,[10] and the proposed leasing system described in the final EIS differed substantially from the system described in the draft that was circulated for public comment. The court enjoined DOI from implementing the EMARS program and from any new leasing, except where the proposed lease was necessary to maintain an existing mining operation or necessary to provide reserves to meet existing contracts, until DOI fully complied with the requirements of NEPA,[11]

The case was settled on June 14, 1978 under an agreement permitting additional leasing and the processing of 20 PRLAs while DOI developed a revised coal program and EIS.[12] By 1980, leasing under the 1978 settlement had resulted in 29 new leases covering 20,822 acres containing 212 million tons of recoverable reserves.

The task of preparing an adequate EIS and formulating changes to the system of leasing Federal coal reserves fell to the new Carter administration and the moratorium continued. By April 1979, the EIS process was completed.[13] In July 1979, under the Federal Coal Leasing Amendments Act of 1976 (FCLAA),[14] the Federal Land Policy and Management Act of 1976 (FLPMA),[15] and the settlement of NRDC v, Hughes, DOI promulgated regulations implementing a new Federal coal leasing program.[16] The first lease sales under the new program were held in January 1981.

Federal Coal Leasing Amendments Act of 1976

FCLAA contains several provisions aimed at what were characterized in the hearings as problems of speculation and nonproduction. The noncompetitive preference right leasing system was repealed on the basis that it did not grant the public a “fair return.” All new leases are to be issued competitively and no bid can be accepted for less than the fair market value of the lease. The amendments also provide for: 1) the consolidation of leases into “logical mining units” (LMUS) to assure maximum economic recovery (MER): 2) dili-

84-142 0 - 81 - 16 : QL 3

gent development and continuous operation on each lease, and 3) preparation of a comprehensive land use plan before coal lease sales. See table 74 summarizing the major provisions of FCLAA.

Federal Land Policy and Management Act

FLPMA is the comprehensive "organic" act for BLM. Before passage of FLPMA, BLM operated on a series of authorizing acts, reorganization plans, and secretarial orders which gave little guidance to the overall management of the public lands. Each act addressed a separate problem, but failed to set goals and objectives for BLM as it attempted to balance the use and development of Western lands under its jurisdiction.

In FLPMA, Congress directed BLM to manage the public lands (including Federal mineral interests under private surface) within a framework of land use plannng. Among the principles set out in the legislation are the guidance to manage the lands for "multiple use" and "sustained yield" and to assure that the fair market value is received for the sale or use of public resources.[17] BLM was directed to protect areas of critical environmental concern, to consider present as well as future uses of public lands, to provide for compliance with applicable Federal and State pollution control laws, and to coordinate planning activities with those of other Federal, State, and local agencies. Section 603 of FLPMA also directs DOI to inventory and study BLM roadless lands for potential congressional designation as wilderness areas. The general requirements for management of public lands under FLPMA also govern activities on Federal mineral leases.

Table 74.—Federal Coal Leasing Amendments Act of 1976: Summary of Major Provisions

Sec. 2	All leases are to be sold by competitive bid with 50 percent of lands offered in any year to be awarded under a system of deferred bonus bidding and a "reasonable number" of tracts are to be reserved for leasing by public bodies. No bid may be accepted for less than the fair market value of the tract offered. Minimum lease size is changed from 40 acres to such size that "will permit the mining of all coal which can be economically extracted".
Sec. 3	The Secretary shall not issue a lease to a lessee who has held a lease for ten years (after passage of FCLAA) without producing coal in commercial quantities. All lands to be leased must be included in a comprehensive land use plan. DOI must consult with State and local governments and provide opportunities for public hearings if requested in preparing land use plan. Secretary must consider the social, economic, and other impacts on the communities affected and provide an opportunity for a public hearing before a lease is issued. DOI must obtain consent of Federal surface management agencies outside DOI before leasing lands under their jurisdiction. DOI must consult with State Governor before leasing National Forest lands. Advance notice must be given of competitive lease sales including publication in local newspapers. No mine plan for leased lands may be approved unless it provides for maximum economic recovery of coal within the tract. All coal leases are to contain provisions requiring compliance with the Federal Water Pollution Control Act and the Clean Air Act.
Sec. 4	Repeals, subject to valid existing rights, provision allowing noncompetitive leasing through issuance of prospecting permits and preference right leases. Establishes a system of nonexclusive exploration licenses. Licensees must furnish all data acquired to Secretary, however, information is kept confidential until after the area is leased.
Sec. 5	Repeals, subject to valid existing rights, provision for collective contracts for exploration, development and operations. Substitutes concept of Logical Mining Unit (LMU). Allows consolidation of Federal leases and non-Federal lands into single LMU if maximum economic recovery is served. Lease terms in LMU may be modified so that requirements imposed on leases are consistent. Pre-FCLAA leases may be included in LMU with consent of lessee. Aggregate production from LMU may be used to meet diligence and continued operation requirements. Mining plan approved for LMU must provide for depletion of LMU reserves in 40 years. LMU may not be larger than 25,000 acres.
Sec. 6	Amends section 7 of MLA to provide that leases are for an initial period of 20 years with readjustments at the end of the initial term and every 10 years thereafter. Any post-FCLAA lease not producing in commercial quantities at the end of 10 years shall be terminated. Minimum royalty for coal mined by surface methods shall be 12.5 percent; with a lesser royalty as determined by the Secretary for coal recovered by underground methods. Allows payment of advance royalties (determined by a fixed reserve to

Table 74.—Federal Coal Leasing Amendments Act of 1976: Summary of Major Provisions—Continued

	production ratio) in lieu of continued operation, however, advance royalties may not be accepted for more than 10 years during the period of any lease. Requires submittal of a mining and reclamation plan within 3 years after the lease is issued; Federal surface management agency must consent to DO I approval of mine plan.
Sec. 7	Establishes program for comprehensive coal exploration program for Federal lands to support land use planning and leasing operations. Information from coal exploration program, except for certain proprietary data, is to be made public.
Sec. 8	Requires annual reports to Congress by the Secretary of the Interior on the management of Federal coal leases and by the Attorney General on competition in the coal industry, including an analysis of whether the antitrust laws are effective in preserving or promoting competition in the coal or energy industry.
Sec. 9	Amends the revenue distribution provisions of section 35 of the MLA by reducing the amount paid to the Reclamation Fund from 52½ percent to 40 percent (and raising the amount paid to the States by 12½ percent.) Directs that States may spend their share of the revenues as each State Legislature provides giving priority to the needs of communities impacted by Federal mineral leasing.
Sec. 10	Requires Office of Technology Assessment study of Federal coal leases.
Sec. 11	Amends section 27 of the MLA to provide that no entity may control more than 46,080 acres of coal leases and permits in any one State nor more than a total of 100,000 acres in the United States. Lessees controlling more than 100,000 acres on passage of FCLAA may continue to own their leases, but may not acquire more leases until the total acreage controlled is less than 100,000 acres. The definition of a lessee entity is broadened to include a person, association, or corporation, or any subsidiary, affiliate or persons controlled by or under common control with such person, association or corporation.
Sec. 12	Authorizes leases to governmental entities of acquired lands set aside for military or naval purposes.
Sec. 13	Repeals, subject to valid existing rights, authority to lease an additional 2,560 acres of coal lands to a lessee who has exhausted the reserves in the original lease. Substitutes new provision allowing noncompetitive leasing of up to 160 acres as a modification to a contiguous existing lease.
Sec. 14	Amends section 39 of MLA to limit authority of Secretary to waive suspend or reduce advance royalties.
Sec. 15	Requires Secretary to consult with Attorney General before drafting rules and regulations or before issuing, renewing or readjusting leases as to whether the proposed action would create a situation inconsistent with the antitrust laws.

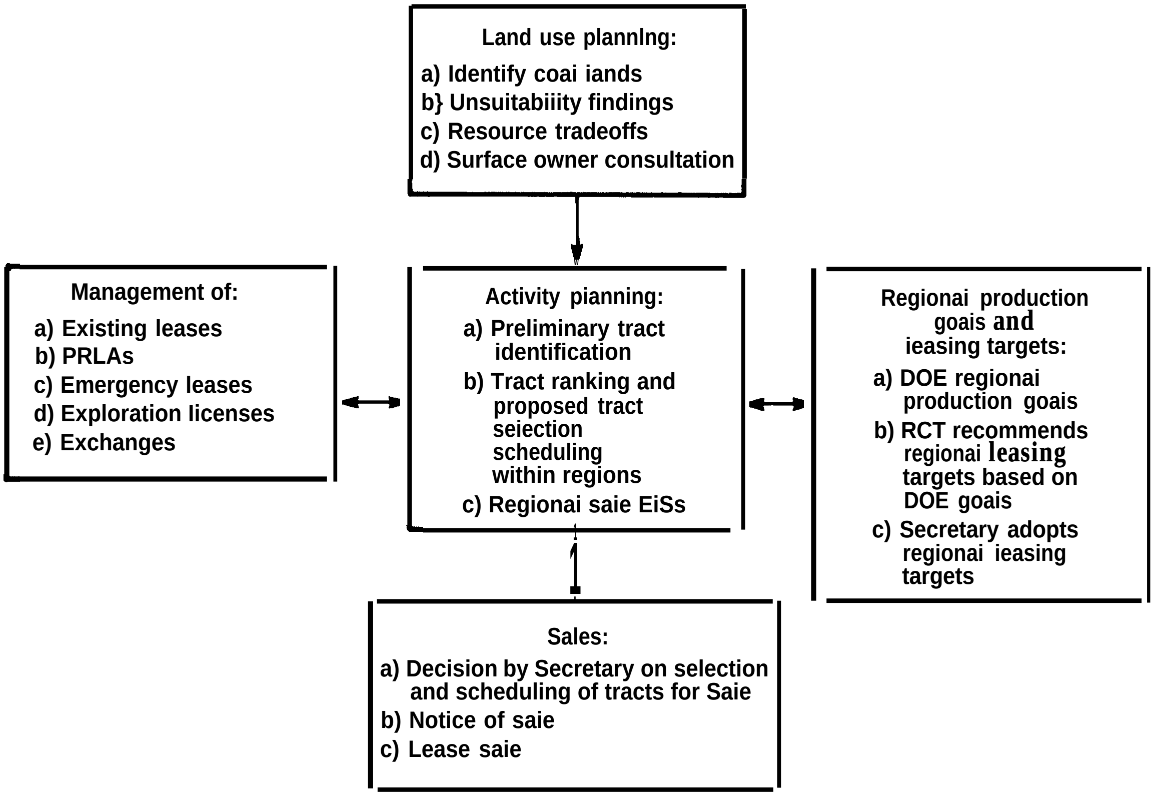
SOURCE Office of Technology Assessment

1979 Federal Coal Management Program

Under the 1979 coal management program, all Federal coal leasing is done under BLM's overall land use planning program established in section 202 of FLPMA. Figure 42 shows the lease planning and sales process under the July 1979 Federal Coal Management Program. The land use planning and coal management programs include a procedure for reviewing existing and potential leases to determine their suitability for mining according to a series of "unsuitability criteria. " Areas are only considered for leasing if they have a high to medium coal development potential and have been classified as a known recoverable coal resource area [KRCRA). DOI's unsuitability criteria are applied to these lands and a determination made as to whether the lands are suitable for leasing. Federal lands that have been leased also are reviewed for their suitability for mining during the general land management planning process and on mine plan approval. The use of unsuitability criteria for existing leases results in recommendations for mitigation requirements when a mine plan is proposed. The impact of the land use planning unsuitability criteria on pre-FCLAA leases is discussed more fully in chapter 10.

Several agencies and departments share responsibility for management and oversight of coal leases on Federal lands. Table 75

Figure 42.—Federal Coal Management Program: Department of the Interior Agency Involvement



Description of action	Agency involvement
Planning update — unsuitability criteria	BLM; FWS
Expressions of interest	BLM
Tract delineation	GS; BLM
Tract site-specific analysis	BLM; GS; OSM
Tract ranking	BLM; GS; FWS; OSM
Tract selection, scheduling, and analysis	BLM; GS; FWS
Regional EIS	BLM; GS; FWS; OSM; HC & RS; BR; BIA; Dept
DEIS printing and distribution	BLM
Public review period	BLM; GS; FWS; OSM; HC & RS; BR; BIA
PFEIS, development, and review	BLM; GS; FWS; OSM; HC & RS; BR; BIA
FEIS printing and distribution	BLM
DOE review, Governor's consultation	BLM
Secretarial review decision on FEIS	Secretary's office
Prelease sale activities	BLM; GS
Lease sale begin	BLM

Key.
BIA Bureau of Indian Affairs
BR: Bureau of Reclamation
DEIS: draft environmental impact statement
FEIS: final environmental impact statement
HC & RS: Heritage, Conservation, and Recreation Service
PFEIS: preliminary final environmental impact statement
RCT: regional coal team

SOURCE: U.S. Department of the Interior, Bureau of Land Management, June 1980.

Table 75.—Department of the Interior Division of Functions and Responsibilities Concerning Management of Federal Coal Between the Office of Surface Mining, the U.S. Geological Survey and the Bureau of Land Management (OSM, USGS, and BLM)

Function	Prime responsibility	Joint responsibility	In consultation with	Concurrence from
Preleasing functions				
Evaluate coal resources	USGS	—	—	—
Petition process for designation of Federal lands unsuitable for all or certain types of surface coal mining operations	OSM — Receives petitions — Conducts hearings — Issues decisions	Surface Management Agency and other appropriate State and local agencies	—	—
Federal coal lands review	BLM — Applies criteria in determination of suitability	—	OSM, USGS and other surface managing agencies	OSM — Establishes ground rules and criteria for Federal coal lands review
Preparation of regional EIS or site-specific prelease EIS concerning lease tract selection	BLM lead agency (unless other agency designated lead agency) — Relating to lease tract selection	—	OSM, USGS and other appropriate agencies and State and local interests	—
Preparation, special lease terms and conditions	BLM	—	OSM (responsibilities under SMCRA - to administer protection requirements of the act), USGS (responsibilities under the MLA)	USGS, OSM, and DOE
Act as Secretary's official representative in dealing with lease applicants	BLM	—	—	—
Surface owner consent	BLM (lease tract selection function)	—	—	—
Post/easing premining functions				
Prepare recommendations on applications for use of federally owned surface over leased coal for rights not granted in Federal coal lease	BLM	OSM and USGS (BLM receives applications) - prior to receipt of coal mining plan it is solely USGS responsibility to report on surface use application	USGS before mining plan; OSM after mining plan filed.	–
Delineation of "permit area"	None until mining plan filed, Then OSM assumes responsibility with concurrence of BLM and USGS	—	—	BLM and USGS
Review, approval of mining plans and major modifications; lead agency for preparation of site specific EA/EIS and coordination with other agencies outside DOI	OSM has lead responsibility (formerly assigned to USGS, became essential function of OSM under sec. 201, SMCRA)	BLM and USGS	BLM regarding special requirements relating to protection of natural resources; USGS regarding responsibilities relating to development, production and resource recovery requirements	USGS on production and recovery requirements
Exploration on leased coal lands outside a permit area	USGS receives application and supervises operations for all exploration outside a permit area	—	OSM	—

Table 75.—Department of the Interior Division of Functions and Responsibilities Concerning Management of Federal Coal Between the Office of Surface Mining, the U.S. Geological Survey and the Bureau of Land Management (OSM, USGS, and BLM)—Continued

Function	Prime responsibility	Joint responsibility	In consultation with	Concurrence from
Exploration on leased coal lands within a permit area	OSM	OSM and USGS coordinate a data exchange	USGS	USGS
Responsibility for all non-lessee activity on lease land prior to operations	BLM	—	—	—
Responsibility for deter mining performance bond	OSM (BLM for interim period)	—	—	—
Functions and responsibilities during mining operations				
Act as Secretary's representative in dealing with lessees and/or operators during operations	OSM (formerly USGS and BLM)	USGS retains production functions; OSM assumes environmental and enforcement functions; BLM retains nonmining functions outside the permit area, including rights-of-way and ancillary activities related to mining. USGS and BLM inspection in connection with USGS, BLM functions are coordinated with OSM inspections (except BLM inspections outside the permit area). USGS makes royalty audits and other non field inspections independent of OSM	—	—
Take necessary action in emergency environmental situation	OSM (formerly USGS and BLM)	OSM has primary emergency authority; BLM and USGS have such authority when OSM inspectors are unable to take action before significant harm or damage will occur. USGS and BLM retain their present procedures for emergencies involving loss, waste, or damage to coal and other natural resources and to other M LA functions	–	—
Conduct inspection prior to abandonment and specify and approve abandonment procedures	OSM (primary authority to approve abandonment procedures and approve abandonment of operations)	OSM, USGS, BLM - all have abandonment inspection responsibility	Private surface owner in case of private surface	BLM concurrence in approval of compliance, special requirements: protection of natural resources and post-mining land use of affected lands. USGS concurrence: compliance with production and coal resource recovery requirements.
Release of reclamation bond (permanent program)	OSM	—	—	BLM and USGS concurrence.
Release of lease bond	BLM	—	—	OSM and USGS concurrence.

NOTE: These agencies wiIl also consult with the US Fish and Wildlife Service, both on a general basis, such as during land-use planning, and on a specific basis when required by laws such as The Endangered Species Act

SOURCE U S. Department of the Interior, Bureau of Land Management, *Final Environmental Impact Statement, Federal Coal Management Program,* April 1979, pp. 1-2 shows the division of functions and responsibilities among BLM, the U.S. Geological Survey (USGS), and the Office of Surface Mining (OSM) within DOI for the administration of the Federal coal management program, BLM is the lead agency for implementing DOI's preleasing and leasing functions; OSM is responsible for processing designation petitions and coordinating mine plan review; and USGS is responsible for evaluating the coal resource and enforcing Mineral Leasing Act requirements and collecting lease revenues from production. The Fish and Wildlife Service is consulted on matters involving wildlife and potential impacts on refuges. The Forest Service of the Department of Agriculture becomes involved as the surface management agency for lands in national forests. In addition, the Department of Energy (DOE) shares responsibility with DOI for setting production levels, bidding systems and diligence requirements on Federal energy mineral leases.[18]

As part of the coal management program cooperative Federal-State regional coal management teams were formed which institutionalize the requirements in FCLAA for consultation with State and local governments before leasing. The regional coal teams include representatives of the Western Governors who make specific recommendations to the Secretary of the Interior on where, how much, and when coal should be leased on Federal lands.

DOI and DOE were given collateral responsibilities for establishing regional coal production goals and leasing targets. DOE periodically issues national and regional production goals. These goals in turn are considered by DOI in establishing regional leasing targets. These production goals and leasing targets are used by the regional coal management teams in the "activity planning process" which advises the Secretary on the tract selection, ranking and scheduling proposed lease sales in the regions.

Establishing regional production goals and leasing targets is done in two stages: 1) tract delineation and industry expressions of interest in each land-use planning area; and 2] tract ranking, selection and scheduling, considered over the entire coal region. In delineating tracts, BLM considers the interests of the industry, technical data provided by USGS and the States, MER estimates of USGS, potential LMUs, surface ownership, and regional leasing targets.

Final regional tract ranking, selection and scheduling of lease sales is based on two determinations: 1) a site-specific environmental analysis of the proposed tracts and 2) the regional coal team recommended ranking of the tracts (high, medium, or low) considering geological and economic factors and potential environmental and socioeconomic impacts of mining. At every stage in the overall leasing program, public participation is encouraged through open meetings of regional coal teams, public hearings, opportunities for comment and review during the leasing target and EIS processes. Most of this public participation and consultation with State and local governments is required by FCLAA, After the planning, target setting, tract selection and ranking are completed, the tracts are offered for sale by competitive bid. The first sale under the new program was held in early 1981 in the Green River-Hams Fork region and included one small tract under a special small business set aside arrangement.

Legal Issues Relating to Existing Federal Leases

Of the 565 Federal leases in effect on September 30, 1980, 535 leases containing nearly all of the Federal coal reserves under lease were issued before enactment of FCLAA, and are thus subject in part to different legal requirements than leases issued after FCLAA.

This section examines some of the major legal issues related to the development and management of existing Federal leases and PRLAs including:

- diligent development, and the related concepts of continued operation, LMUS, advance royalties, maximum economic recovery and cancellation;
- exchanges of reserves under existing leases and PRLAs for unleased Federal reserves;
- processing and validity of pending PRLAs; and
- designation of areas on existing leases that are unsuitable for surface mining under section 522 of SMCRA.

Diligent Development and Related Concepts

The concept of "diligent development" of Federal coal leases evolved over a period of time. A number of legal uncertainties still surround its practical application to existing leases. There are several other important concepts that are either directly or indirectly related to diligent development: 1) requirements in the 1920 Mineral Leasing Act for continued operation of a lease once diligent development is achieved, 2) definition of LMUs and logical mining unit reserves to which diligent development and continued operation requirements apply, and 3) advance payment of royalties either to encourage diligent development, or in lieu of requirements for continued operation.

Common Law Diligence

Diligent development as an implied covenant of mineral leases originated in common law. Under the Mineral Leasing Act, diligent development is an express condition of every Federal lease. The condition of diligent development imposes an obligation on the lessee to produce the mineral so that the lessor receives the agreed royalty to fulfill the lessor's interest in the contract.

As applied to private mineral leases under common law, the courts have generally defined diligence as requiring the lessee to "do whatever under the circumstances would be reasonably expected of a prudent operator of a particular lease, having a rightful regard for the interests of both the lessor and the lessee."[19] Market considerations can be taken into account, however, absence of a market is not grounds for indefinite deferral of production. Each case is decided on its specific circumstances. Lease provisions can provide more specific diligence standards such as requiring production to commence within a definite time period or allowing the lessee to pay advance royalties instead of producing.

Compensation for the rights to explore and develop mineral resources is often paid in a two-part process. The initial rights to enter, explore, and develop a leasehold are granted to lessees in exchange for payment of a fee (bonus) generally made at the time the lease is executed. The second payment is a continuous periodic payment of royalties, usually based on a percentage of the value of the product. To ensure that the lessor received some periodic payment even in the absence of production, annual rentals are sometimes negotiated that are based on minimal payments for holding the lease,

The size of the bonus payment is generally proportional to the probability of finding and producing minerals at a profit. If the probability of discovering commercial high-grade resources is high, the bonus payment will be large. If the probability of commercial discovery and economic production is highly uncertain, the bonus payment will be low.

Since royalties are not received until production begins, and production must continue or the royalties will cease; a condition (stipulation) requiring continued operation is often included in a lease agreement to ensure that production and income continue. Failure to pursue diligent development of the leasehold and to continue production constitutes a breach of the lease contract. The most viable remedy available to a lessor harmed as the result of a contractual breach is cancellation of the lease, and if the lessor choses, resale of the lease to one who will develop the leasehold.

The 1976 Diligence Regulations

Although all pre-FCLAA coal leases by statute must contain both the conditions of diligent development and continued production, enforcement of these provisions were rare until 1976 when the terms and meaning of the provisions were defined by rulemaking. Between 1920 and 1976, various lease terms had imposed minimum investment and production requirements and advance royalties, but these provisions were not applied universally to all leases.[20]

In response to an unprecedented period of greatly expanded leasing during a time of decreasing Federal coal production, DOI began grappling with the problem of diligence in lease development in 1970. Its initial efforts concentrated on policies aimed at applying economic leverage on lessees to ensure production, e.g., such as gradually increasing advance payment royalties, which would require front-end payments that would be offset against future production. Congress, however, preferred the establishment of specific time limits for development, therefore, in 1974-1975 DOI proposed regulations that defined diligent development and set time limits for performance, but also retained the option for advanced royalty payments (see table 76 summarizing proposed and final regulations on diligent development). Final regulations were promulgated by DOI in May 1976 shortly before passage of FCLAA,[21] With the approval of the 1976 FCLAA, a dual system governing diligent development was established, The legal effect was to create two similar, but not identical diligence standards, one applying to leases issued before to August 4, 1976 (pre-FCLAA), and the second applying to leases issued after that date (post-FCLAA). These regulations have remained largely unchanged since repromulgation in December 1976 to include FCLAA requirements.[22] The Department of Energy Organization Act of 1977 transferred the Secretary of the Interior’s authority to issue regulations on diligence for Federal leases to the Secretary of Energy.[23] The Secretary of the Interior retains the responsibility for enforcement, but he cannot change these regulations.

Summary of Diligent Development and Continuous Operations Regulations

Section 7 of the Mineral Leasing Act of 1920 requires that all Federal coal leases are subject to diligent development and continuous operations. Lessees failing to meet these conditions can lose their Federal coal leases. Moreover, under section 3 of FCLAA, after August 4, 1986, with few exceptions, lessees who have held a nonproducing lease for 10 years or more cannot obtain any new Federal coal leases.[24]

In 1976, DOI issued regulations defining diligent development for Federal coal leases as timely preparation for and actual production of coal in commercial quantities from the lease, or from the LMU of which the lease is a part, by June 1, 1986 or within 10 years after the lease is issued, whichever is later.

These regulations established two separate standards for diligent development of Federal leases by defining commercial quantities differently for pre-FCLAA and post-FCLAA leases. Commercial quantities for pre-FCLAA leases are defined as “production

Table 76.—Changes in Definitions of Diligent Development and Continued Operation, Proposed and Final Regulations (1974-79)

Source	Diligent development	Continued operation
Federal Register Dec. 11, 1974 (Proposed) 39 F.R. 43229	Diligent development means: preparing to extract coal from an LMU in a manner and at a rate consistent with a mining plan approved by the mining supervisor. Qualifying activities and expenditures include environmental monitoring and baseline studies, geological and geophysical studies, engineering feasibility studies, mine development and construction work, and contracts for purchase or lease of equipment undertaken for the purpose of obtaining production from the LMU. Lessee must report on activities in support of diligent development to mining supervisor every 2 years and indicate plans for continuing diligent development for following 2-year period.	Continuous operations defined as: extraction, processing, and marketing of coal in commercial quantities from the LMU without interruptions totaling more than 6 months in any calendar year except as provided in 30 U.S.C. 207 and in the lease.
Federal Register Dec. 31, 1975 (Reproposed) 40 F.R. 60070	Diligent development means timely preparation for and initiation of production from the LMU of which the lease is a part so that one-fortieth of the LMU reserves associated with the lease are extracted within 10 years from the effective date of the regulation or issuance of the lease, whichever is later. Additional time for meeting diligence may be granted for a period equal to the time during which diligent development was significantly impaired by: 1. a strike, the elements or casualties not attributable to the lessee; 2. an administrative delay in the DOI not caused by the lessee's action; or 3. extraordinary circumstances not attributable to the lessee and not foreseeable by a reasonably prudent operator (extraordinary circumstances do not include: conditions arising out of normally foreseeable business risks such as fluctuations in prices, sales, or costs, including foreseeable costs of environmental protection requirements; commonly experienced delays in delivery of supplies or equipment; or inability to obtain sufficient sales).	Continuous operations defined as extraction, processing, and marketing of coal from the LMU after diligent development has been achieved in an amount of 1 percent or more of the LMU reserves in each calendar year subject to the exceptions in 30 U.S.C. 207 and in the lease.
Federal Register May 28, 1976 (Final) 41 F.R. 21779	Diligent development defined as: timely preparation for and initiation of production from the LMU of which the lease is a part so that one-fortieth of the LMU reserves associated with the lease are extracted within a period of 10 years from the effected date of the regulations (i.e., by June 1, 1986) or from the issuance of the lease, whichever is later. Extensions may be granted for time during which diligent development is substantially imparied by: 1. a strike, the elements or casualties not attributable to the lessee; 2. an administrative delay in the DOI not caused by the lessee's action; or 3. extraordinary circumstances not attributable to the lessee and not foreseeable by a reasonably prudent operator. An extension may also be granted for up to 5 years (i.e., to June 1, 1991) if the lessee cannot meet diligence because of: —time needed for development of an advanced technology (e.g. in situ gasification or liquefaction processes); —the large magnitude of the project (ordinarily 2 million tons per year for an underground mine and 5 million tons per year for a surface mine); or —a contract or equivalent firm commitment for the sale of the first 2½ percent of the LMU reserves after the 10-year period.	Continuous operations defined as the extraction, processing, and marketing of coal in the annual average amount of 1 percent or more of the LMU reserves computed on a 3-year basis including the 2 previous years. With approval of the mining supervisor, advance royalties may be paid in lieu of continuous operations for leases issued or readjusted after the effective date of the regulations,

Table 76.—Changes in Definitions of Diligent Development and Continued Operation, Proposed and Final Regulations (1974-79)—Continued

Source	Diligent development	Continued operation
Federal Register Oct. 15, 1976 (Proposed) 41 F.R. 45571	For pre-FCLAA leases not readjusted after Aug. 4, 1976, diligent development means timely preparation for and initiation of production from the LMU of which the lease is a part so that coal is actually produced in commercial quantities by June 1, 1986 (commercial quantities is defined as production of one-fortieth of the LMU reserves associated with the lease). Extensions may be granted under the same conditions as in the May 1976 final regulations, but the period for meeting diligence cannot be extended beyond Aug. 4, 1986, or the date the lease is first subject to readjustment after FCLAA, whichever is later For post- FCLAA leases and all readjusted pre-FCLAA leases, diligent development means timely preparation for and initiation of production from the LMU of which the lease is a part so that coal is actually produced in commercial quantities (defined as 1 percent of the LMU reserves) by 10 years after the effective date of the lease or by June 1, 1986 or by the date on which the pre-FCLAA lease is first subject to readjustment after FCLAA, whichever is later. Extensions granted to pre-FCLAA leases can continue in effect after readjustment, but only until Aug. 4, 1986.	‘Continued operation means the extraction, processing, and marketing of coal in the amount of 1 percent of all the LMU reserves associated with the lease for each of the first 2 years of continued operation and in an annual average amount of 1 percent of all the LMU reserves associated with the lease for all following years The annual average amount will be calculated on a 3-year basis with the 2 preceding years
Federal Register Dec. 29, 1976 (Final) 41 F.R. 56643	For pre-FCLAA leases: Diligent develop-merit means timely preparation for and initiation of production from the LMU of which the lease is a part so that coal is actually produced in commercial quantities (defined as one-fortieth of the LMU reserves) by June 1, 1986 Extensions may be granted under same conditions as May 1976 final regulations. For post. FCLAA leases: diligent development means timely preparation for and initiation of production from the LMU of which the lease is a part so that coal is actually produced in commercial quantities (defined as 1 percent of the LMU reserves) within 10 years from the effective date of the lease (No provisions for any extensions for post-FCLAA leases are included in the regulations.)	Continued operation means production of 1 percent of the LMU reserves in each of the first 2 years after meeting diligence, and production at an annual average rate of 1 percent of the LMU reserves thereafter. The annual average rate is calculated on a 3-year basis with the 2 previous years
Federal Register Mar. 19, 1979 (Proposed) 44 F.R. 16800	No substantive changes proposed to December final regulations (The authority to promulgate rules relating to diligence and minimum production requirements for Federal leases was transferred to the Secretary of Energy by section 302 of the Department of Energy Organization Act)	No substantive changes proposed to December 1976 final regulations
Federal Register July 19.1979 (Final) 44 F R 42583	No substantive changes to December 1976 final regulations—relevant sections renumbered as part of new coal management program regulations	No substantive changes to December 1976 final regulations-relevant sections renumbered as part of new coal management program regulations.

NOTE This table generally summarizes the regulations rather than quoting them in full.

of one fortieth (21/2 percent) of the recoverable reserves of the LMU of which the lease is a part. ” For post-FCLAA leases, commercial quantities are defined as “production of one percent of the lease’s LMU reserves within 10 years after lease issuance, ” Under certain circumstances, the diligence period can be extended for pre-FCLAA leases,

Logical Mining Units

The current regulations define diligence and continuous operations requirements according to LMUS rather than leases. The basis of the LMU concept, as generally understood, is that geological and engineering characteristics should delineate the boundaries of the area that can be leased and mined economically with appropriate environmental safeguards. In practice, however, the legal right to mine coal often dictates the area to be developed, which can result in a less than optimal mining unit, especially in areas with scattered and diverse ownership. The concept, with some modification, was incorporated into the 1976 diligence regulations and FCLAA. The regulations currently define an LMU as:

> ,.. an area of coal land that can be developed and mined in an efficient, economical, and orderly manner with due regard for the conservation of coal reserves and other resources. An LMU may consist of one or more leases and may include intervening or adjacent non-Federal lands, but all lands in an LMU must be contiguous, under the effective control of a single operator, and capable of being developed and operated as a unified operation with complete extraction of the LMU reserves within 40 years from the date of first approval of a mining plan for that LMU. No LMU approved after August 4, 1976, shall exceed 25,000 acres, including both Federal and non-Federal coal deposits.[25]

Notwithstanding this definition, the rules also provide that "each lease shall automatically be considered to constitute an LMU on the effective date of the lease or June 1, 1976, whichever is later.[26] The single lease LMU can later be modified to add other Federal or non-Federal coal with the approval of DOI, but the enlarged unit must meet the general LMU criteria. The single lease LMU was established in the May 1976 regulations primarily for administrative convenience in applying diligent production requirements, however, it was reinforced at least indirectly by section 5 of FCLAA which requires the lessee's consent before pre-FCLAA leases can be consolidated into a designated LMU under that section. Table 77 summarizes the development of the LMU concept in DOI regulations.

For pre-FCLAA leases, the LMU is determined by the lease boundaries, and the LMU reserves for diligence and continuous requirements are the recoverable reserves of the lease unless the lessee petitions either to have the LMU boundaries modified to include other Federal leases or non-Federal coal or to relinquish portions of the lease reserves that will not be mined. If a new LMU is designated, the aggregate production from all lands in the unit can be used to meet diligence for all producing and nonproducing leases in the unit.

Diligence Extensions

Extensions can be approved for pre-FCLAA leases for delays in meeting diligence because of conditions that are beyond the control of the lessee. These extensions are required by sections 7 and 39 of the Mineral Leasing Act.[27] These nondiscretionary extensions are granted for a period of time equal to the time during which diligence is impaired by: strikes, weather conditions, casualties, Government delays, or extraordinary circumstances that are not the fault of the operator. Regulations on whether and under what circumstances nondiscretionary extensions might be available to post-FCLAA lessees have not yet been promulgated.[28]

In determining whether such extraordinary circumstances exist, the regulations specifically exclude "any condition arising out of normally foreseeable business risks such as: fluctuations in prices, sales, or costs, including foreseeable costs of compliance with requirements for environmental protection; commonly experienced delays in delivery of supplies or equipment; or inability to obtain sufficient sales. '[29]

The pre-FCLAA lessee can also apply for a single extension of up to 5 years, i.e., up to June 1, 1991, under certain circumstances. These discretionary extensions may be granted for: 1) additional time for developing new coal technologies, such as synfuels or nonwater-based coal slurry pipelines; 2) extraordinarily large or complex mining operations (generally exceeding 2 million tons per year for underground mines and 5 million tons per year for surface mines); or 3) firm contracts to produce and deliver the first 2½

Table 77.—Changes in Definitions of Logical Mining Unit and Logical Mining Unit Reserves Proposed and Final Regulations (1974.79)

Source	Logical mining unit	Logical mining unit reserves
Federal Register Dec. 11, 1974 (Proposed) 39 F.R. 43229	An LMU is a compact area of coal land that can be developed and mined in an efficient, economical, and orderly manner with due regard for conservation of coal reserves and other resources and in accordance with an approved mining plan, The LMU may consist of one or more Federal leaseholds and may Include Intervening or adjacent non-Federal lands insofar as all lands are under the effective control of a single operator. Mining supervisor (MS) authorized to approve or establish an LMU. All leases must be included in an LMU within 2 years from effective date of regulations If the lessee IS unable after a good faith effort to form an LMU as defined in the regulations, a single lease will be treated as an LMU for diligence and reporting requirements.	No definition proposed
Federal Register Dec. 31, 1975 (Reproposed) 40 F.R. 60070	An LMU IS an area of coal land that can be developed and mined in an efficient, economical, and orderly manner with due regard to the conservation of the coal reserves and other resources. An LMU may consist of one or more Federal leases and may Include Intervening or adjacent non-Federal lands, if all lands are under the control of a single operator and can be developed and operated as a unified mine. The MS IS authorized to approved or establish an LMU. Every Federal lease wiIl automatically be considered an LMU; the LMU boundaries may later be changed: 1. at request of lessee with approval of MS with concurrence of BLM; 2 at discretion of MS with concurrence of BLM; 3. at request of BLM with approval of MS.	As of a given date LMU reserves are the sum of 1) estimated recoverable Federal reserves under lease in the LMU, and 2) estimated non-Federal recoverable reserves that wiIl be mined before extraction of all Federal reserves in the LMU. Federal LMU reserves will be the estimated reserves on the effective date of regulations—or the date of the lease, whichever is later, Reserves may be adjusted by MS whenever significant new information becomes available about the amount of such reserves, including the time at which *a mining plan IS* approved for the Federal portion of the LMU.
Federal Register May 28, 1976 (Final) 41 F.R. 21779	An L-MU IS an area of-coal land that can be developed and mined in an efficient, economical, and orderly manner with due regard to the conservation of the coal reserves and other resources. An LMU may consist of one or more Federal leases and intervening or adjacent non-Federal lands, but all lands in an LMU must be under the effective control of a single operator and capable of being developed and operated as a unified mine Every lease wiIl automatically be considered by itself an LMU as of the effective date of the lease or the regulations, whichever IS later, Any LMU other than a single Federal lease wiIl become effective only on its approval by the MS where it IS requested by the lessee. Boundaries of LMU may later be changed on application by the lessee and with approval of the MS and after consultation with BLM.	As of a given date, LMU reserves are the sum of 1) estimated recoverable Federal reserves under lease in the LMU, and 2) estimated non-Federal recoverable reserves that wiIl be mined before extraction of all the Federal reserves in the LMU. LMU reserves associated with a Federal lease are the estimated LMU reserves as of effective date of approval of LMU. LMU reserves may be modified when MS approves modification of LMU boundaries or whenever significant new information becomes available about the amount of recoverable reserves including when a mine plan IS approved
Federal Register" Oct. 15, 1976 (Proposed) 41 F.R. 45571	An L-MU IS an area of coal land that can be developed and mined in an efficient, economical, and orderly manner with due regard for conservation of the coal reserves and other resources. An LMU may consist of one or more Federal leases and intervening or adjacent non-Federal lands, but all lands in the LMU must be contiguous, under the effective control of a single operator and capable of being developed and operated as a unified operation with complete extraction of the LMU reserves within 40 years of first approval of the mine plan for the LMU, No LMU, except those approved before Aug 4, 1976, can exceed a total of 25,000 acres of Federal and nonfederal lands,	Definition of LMU reserves is the same as May 1976 final regulations. The estimated LMU reserves may be adjusted by the MS whenever a modification of the LMU boundaries IS approved, or the lessee surrenders deposits under lease in the LMU, or whenever additional Information becomes available about the amount of such reserves including when a mine plan is approved,

Table 77.—Changes in Definitions of Logical Mining Unit and Logical Mining Unit Reserves Proposed and Final Regulations (1974-79)—Continued

Source	Logical mining unit	Logical mining unit reserves
	Notwithstanding the above definition, every Federal lease will automatically be considered an LMU on the effective date of the lease or June 1, 1976, whichever is later. An LMU other than a single lease LMU will become effective only at the direction of the MS or by approval of the MS at the request of the lessee. (These designated LMU's must meet the requirements of section 5 of FCLAA.)	
Federal Register Dec. 29, 1976 (Final) 41 F.R. 56643	Unchanged from October 1976 proposed regulations,	Logical mining unit reserves are the sum of 1) estimated recoverable Federal reserves under lease in the LMU and 2) estimated non-Federal recoverable reserves in the LMU. The LMU reserves associated with the Federal lease are the estimated recoverable reserves on the effective date of the LMU. The LMU reserves may be adjusted by the MS whenever the LMU is modified, or the lessee surrenders deposits in the LMU, or whenever significant new information becomes available about the amount of such reserves including when a mine plan is approved.
Federal Register July 19, 1979 (Final) 44 F.R, 42583 now 43 CFR 3400.0-5	An LMU is an area of coal land that can be developed and mined in a efficient, economical, and orderly manner with due regard for the conservation of coal reserves and other resources. An LMU may consist of one or more leases and may include intervening or adjacent non-Federal lands, but all lands in the LMU must be contiguous (i.e., having one point in common, including cornering tracts), under the effective control of a single operator, and capable of being developed and operated as a unified operation with complete extraction of the LMU reserves within 40 years from the date of first approval of the LMU mine plan. No LMU approved after Aug. 4, 1976 may exceed a total of 25,000 acres of Federal and non-Federal lands. Notwithstanding the above definition, every Federal lease will automatically be considered an LMU on the effective date of the lease or June 1, 1976, whichever is later. An LMU, other than a single lease LMU, will become effective only on approval by the MS on application by the lessee, or by direction of the MS, or by designation during the normal tract delineation phase of the coal activity planning process. The MS will not approve the designation of such an LMU unless maximum economic recovery of all the Federal coal deposits in the LMU will be achieved.	LMU–reserves mean the sum of 1) estimated recoverable reserves under Federal lease in the LMU, and 2) estimated non-Federal recoverable reserves in the LMU. The Federal lease LMU reserves are estimated as of the date the LMU becomes effective. The LMU reserves may be adjusted by the MS whenever the LMU boundaries are modified or when significant new information becomes available on the amount of such reserves.

NOTE' This table generally summarizes the regulations rather than quoting them in full

percent of the coal after the lo-year period.[30] These discretionary extensions are not available for post-FCLAA leases.

Continuous Operations

After attaining diligence, both pre-FCLAA and post-FCLAA lessees must meet the continuous operations requirements. The regulations define continuous operations for all Federal leases as production of an average of 1 percent of the LMU reserves annually, with 1 percent produced in each of the 2 years immediately following the year in which the lessee meets diligence. With approval of DOI, the lessee can pay advance royalties in lieu of actual production in order to satisfy continuous operations requirements. Such advance royalty payments, however, cannot be made in lieu of continued operation for more than 10 years during the life of the lease. Continuous operations requirements for pre- and post-FCLAA leases can be suspended during periods when production is interrupted because of conditions beyond the control of the lessee. Minimum annual production requirements can also be lifted when operations on the lease are suspended with the approval of the mining supervisor to promote conservation of coal resources. Table 76 shows the development of continuous operations regulations.

Advance Royalties

Advance royalties are commonly used by private coal lessors to ensure that mine production stays on schedule. If production proceeds according to the predetermined schedule, the lessee continues to pay the regular royalty, but if production is lower than scheduled, advance royalties are collected on the difference between scheduled and actual production. The purpose for using advance royalties is to provide a financial incentive for the lessee to develop the lease.

Advance royalties have been used in several ways in pre-FCLAA leases: 1) in lieu of continued operation requirements for leases issued between 1920 and 1971; 2) as an incentive to begin production for leases issued during the moratorium between 1971 and 1976 by requiring payment of advance royalties beginning in the sixth year after issuance of the lease based on a predetermined schedule (similar to the way advance royalties are used in the private sector); and 3) in lieu of continued operation for up to 10 years during the term of the lease as allowed by FCLAA.[32]

Advance royalties are currently based on an annual production rate that would exhaust the mine reserves in 40 years (2.5 percent per year) .33 This rate is higher than the 1 percent rate required to satisfy continuous operation regulations and thus is an incentive to produce.

Cancellation of Leases

Under section 31 of the Mineral Leasing Act of 1920 if the lessee fails to comply with the terms of the lease, a provision of the act, or general regulations issued under the act that were in force at the date of the lease, the Secretary may ask the Justice Department to sue in Federal court to have the lease forfeited and canceled.[34] For pre-FCLAA lessees, breach of the conditions of diligent development or continued operation could result in cancellation of the lease in court proceedings if the court decided that the lessee did not meet diligence because he or she did not satisfy the minimum production defined in the 1976 regulations (or some other standard).[35] Section 6 of FCLAA provides that any post-FCLAA lease not producing in commercial quantities 10 years after issuance shall be terminated automatically. Termination is an administrative proceeding and is subject to judicial review. The May 1976 DOI regulations limited the circumstances that the Secretary could consider in deciding whether to cancel a lease for failure to meet diligence by generally excluding lack of markets.[36] Both pre- and post-FCLAA leases must be canceled through court proceedings brought under the general provisions of section 31 for any other breach of the lease terms or conditions, or for violation of the act or DOI regulations.

Application of the 1976 Diligence Requirements to Existing Leases

Since 1976, DOI has maintained that the 1976 diligence regulations are general regulations implementing the Mineral Leasing Act which are applicable to all coal leases and that the regulations, thus, need not be made specifically part of individual leases through amendment or readjustment. The diligence regulations and other aspects of the coal management program are currently under review by the Reagan administration and could be modified. Whether or not the 1976 regulations are eventually held to be generally applicable to all leases, under certain circumstances the diligence requirements can be made part of individual leases: 1) by voluntary amendment of the lease terms by mutual agreement between DOI and the lessee; 2) by readjustment at the end of the lease term; 3) by amendment as part of the designation of a new LMU under section 5 of FCLAA; or 4) by operation of existing lease terms incorporating future regulations. If the requirements are specifically incorporated into a lease, they are clearly applicable and enforceable for that lease.

Voluntary Amendment

At the request of DOI, some lessees have voluntarily agreed to lease revisions incorporating the diligent production requirements. In other instances, DOI could negotiate the lessee's consent to revise the lease to include the 1976 regulations as part of another transaction involving the lease, such as a modification or segregation, or in exchange for DOI's agreement not to move immediately to enforce the minimum production requirements contained in some existing leases.[37]

Readjustment

Pre-FCLAA leases were originally issued for indeterminate periods subject to readjustment of lease terms, conditions, rentals and royalties at the end of each 20-year period following issuance. The Secretary of the Interior has broad discretion in setting new lease terms. Readjustment generally results in incorporating any changes in the laws and regulations governing leases that were not applicable at the time the original lease was issued. At readjustment, pre-FCLAA diligence requirements are expressly made part of the new lease terms. If the new terms are unacceptable, the lessee can either: 1) decline extension of the lease; or 2) appeal or protest the revised terms. Leases readjusted after August 4, 1976 are to include the 1976 diligence requirements that apply to pre-FCLAA leases. About 244 pre-FCLAA leases are due for readjustment before June 1, 1986. Over 200 pre-FCLAA leases are not due for readjustment until after the initial 1986 diligence "deadline,"

Amendment of Lease Terms on Designation of a Section 5 LMU

Under section 5(b)(4) of FCLAA, when one or more leases, including pre-FCLAA leases with the consent of the lessee, are consolidated into an LMU, the provisions of any Federal lease in the LMU may be amended so that mining will be consistent with the requirements imposed on that logical mining unit.[38] Although "consistency" is not defined and the Secretary is not required to amend the lease, the LMU designation may be used as an opportunity to provide for express application of diligence regulations to leases within the LMU. However, such revision would require the lessee's consent.

As another result of an LMU designation under section 5(b)(3) of FCLAA, the Secretary may (but is not required to) provide, "among other things, that (i) diligent development, continuous operation, and production on any Federal lease or non-Federal land in the logical mining unit shall be construed as occuring on all Federal leases in that logical mining unit . . ." Since approval of an enlarged LMU is discretionary, the lessee's consent to include the 1976 diligence requirements as a stipulation in the lease might be used as a condition for obtaining an LMU approval.[39]

Existing Lease Terms That Incorporate Subsequent Regulations

Federal coal leases issued or renewed after 1965 contain a provision in the initial clause of the lease stating that the lease is issued:

> . . . pursuant and subject to the terms and provisions of (the Mineral Leasing Act of 1920), and to all reasonable regulations of the Secretary now or hereafter in force which are made a part hereof . , .[40]

By accepting the lease with this provision (referred to as the "hereafter clause"), the lessee has specifically agreed to be bound by future "reasonable regulations" made applicable to existing leases without the necessity of formally amending the lease terms. As a result of this express agreement, leases with this clause are subject to the 1976 diligence regulations by operation of the prior lease term. Violation of the subsequent regulations would, therefore, be a violation of the lease provisions and make the lease subject to cancellation under section 31 of the Mineral Leasing Act.[41] The reasonableness of any subsequent regulations would be determined according to general principles of administrative law if the issue were ever litigated. The hereafter clause has been used in thousands of other Federal mineral leases for over 45 years, The meaning of the “hereafter clause” and its impact on the applicability of the 1976 diligence regulations on coal leases have not yet been judicially construed.

Legal and Administrative Issues in the Enforcement of Diligence Requirements

The impact of the 1976 diligence regulations on Federal coal leases is uncertain. The regulations requiring actual production within 10 to 15 years were generally opposed by the coal industry, and the major industry trade groups. The National Coal Association and the American Mining Congress, have continued to criticize the policy.

While many lessees have accepted the 1986 deadline, and many will in fact meet diligence by then (see ch. 6 of this report), legal challenges are likely if DOI enforces the requirements against those lessees who are not in compliance. Among the major legal objections which the industry has raised are: I) the regulations are arbitrary, unreasonable and exceed the Secretary’s authority under the Mineral Leasing Act because of the stringent compliance period imposed and the lack of flexibility in measuring diligence as production of 2½ percent of the LMU reserves; 2) the regulations violate the Mineral Leasing Act by imposing new terms and conditions on the lessee which can only be done at readjustment; 3) the regulations are ineffective to the extent that they conflict with specific lease provisions; and 4) the regulations abridge the lessee’s contractual rights, thus, violating the constitutional prohibition against deprivation of property without due process of law or just compensation.

The only litigation challenging the application of the diligence requirements in the 1976 regulations to pre-FCLAA leases, Mobil Oil Corp. v. Andrus, was settled out of court and thus did not establish any precedent.[42] As a result of the settlement, Mobil received approval of a 5-year extension in the period for meeting diligence for its 1971 lease.

The possible difficulties in enforcing DOI’s diligence regulations were recognized in the Secretarial Issue Document for the Federal Coal Management Program,” One of the major uncertainties is the absence of a prior enforcement history for diligence for Federal coal leases. Before promulgation of the 1976 regulations, DOI had not issued formal rules defining diligent development nor had it canceled any coal lease for failure to meet diligence. As an added complication, many lease forms contain provisions requiring minimum production beginning in the sixth year of the lease. Without the adoption of the 1976 regulations superseding the lease terms and giving 10 to 15 years to meet diligence, many nonproducing lessees would already be in violation of their lease provisions. Ultimately, the issue of the validity and applicability of the 1976 regulations may be decided by the courts. The range of possible results of such challenges include:

- The 1976 diligent development regulations are valid and fully applicable to all leases because all leases are subject to the conditions of diligence required in the 1920 Mineral Leasing Act and to the departmental regulations implementing these requirements, (the position of DOI in Mobil.)44
- The 1976 regulations are invalid and not applicable to pre-FCLAA leases because nothing in the 1920 Mineral Leasing Act authorizes the Secretary to define diligence solely as achieving specified production levels within a definite period of time. (Note: The Mineral Leasing Act and common law diligence conditions would still be applicable although the precise standard to be used would remain undefined.)

94-141 c1 - 81 - 17 : ‘II, 3

- The 1976 diligence regulations are valid but are applicable to pre-FCLAA leases only on readjustment at the end of their current 20-year lease terms or by amendment of lease terms with consent of the lessee either in response to DOI's request or as a possible precondition of approval for designation of a combined LMU under section 5 of FCLAA or other discretionary administrative action.
- The 1976 regulations are valid and applicable to pre-FCLAA leases to the extent that they are consistent with the specific terms and conditions of individual leases issued before the regulations became effective. The regulations would apply to leases containing the "hereafter clause" which incorporates future regulations, as well as to any leases issued before 1965 that include provisions which do not establish different minimum production levels or advance royalty payments to satisfy diligence conditions.

Leases issued after the 1976 FCLAA are clearly subject to the diligent development regulations promulgated under that act and must produce coal in commercial quantities within 10 years after issuance or they will be terminated.

The eventual impact of diligence requirements on pre-FCLAA leases will depend on the interaction of many variables besides the legal precedents that may be established on the applicability of diligence regulations. These factors include: 1) the extent of voluntary compliance by lessees; 2) how many extensions are granted to lessees who cannot meet the 1986 production deadline; 3) how many existing leases are combined with other leases or non-Federal coal reserves to meet diligence by forming a designated LMU under section 5 of FCLAA; 4) how the logical mining unit reserves are defined for each lease; 5) the extent to which leases are readjusted on schedule; 6) the extent of effective enforcement of the 1976 regulations by DOI and the Department of Justice; and 7) how many nonproducing leases are relinquished.

Determination of LMU and LMU Reserves for Diligence

Whether or not some existing leases will meet diligence depends on the USGS determinations of LMU and LMU reserves against which compliance is gaged. There are two kinds of LMUs for the purpose of diligence: 1) single lease LMUs and 2) designated LMUs under section 5 of FCLAA. All existing leases are single lease LMUs under current regulations. Section 5 of FCLAA prohibits consolidation of any pre-FCLAA lease into an LMU without the lessee's consent and no section 5 LMUs had been approved by USGS as of early 1981.

Single lease LMUs are based on the general authority of the Secretary to manage coal leases under the Mineral Leasing Act of 1920 and the regulations originally promulgated in May 1976 before passage of FCLAA. These LMUs consist of the reserves in a single lease that can be mined efficiently and economically with due regard for conservation of the coal resource and other values. They need not consist of a separate mine or mine plan for each single lease LMU. Single lease LMUs need not be contiguous, nor must they be mined out in 40 years. The major difficulty in defining the LMU reserves for single leases occurs in determining which seams to include when the lease has large multiple-seam reserves either that would not be mined in the lessee's normal sequence and method of mining or that do not meet the lessee's coal quality requirements under existing contracts. Each such case will be negotiated separately, depending on the characteristics of each lease and the lessee's circumstances. Thus, in some instances, USGS may omit seams from the LMU reserves or permit the lessee to relinquish particular seams or lease areas that will not be mined.[45]

If a pre-FCLAA lessee requests designation of a section 5 LMU combining a pre-FCLAA lease with other Federal leases or non-Federal lands, the LMU criteria of section 5 also become applicable to the pre-FCLAA leases. Specifically:

1. the Secretary must find that maximum economic recovery of the coal deposits is served by consolidation;
2. all lands in the LMU must be under the effective control of a single operator, be able to be developed and operated as a single operation, and be contiguous;
3. the total acreage of the LMU must be 25,000 acres or less; and
4. any mining plans approved after the establishment of a section 5 LMU must require such diligent development, operation, and production that the reserves of the entire unit will be mined in a period of not more than 40 years.[46]

In addition, the terms of individual Federal leases in the LMU may be amended so that mining on any lease will be consistent with the requirements imposed on the entire LMU. LMU designation of a section 5 LMU is often to the lessee's advantage because the Secretary is authorized to provide that diligent development, continued operation and production occuring anywhere in the unit is considered as occurring on all Federal leases in the unit, thus, allowing a producing lessee to keep nonproducing Federal leases in the LMU after the 1986-91 diligence deadlines and to mine such leases in the optimum sequence for that mine. Designation also allows rental and royalty obligations for all leases in the LMU to be combined and advance royalties can be applied against the combined royalties due.

Many existing lessees will probably request LMU designations under section 5 in order to meet diligence; most of the lessees should qualify for such approval. Some operating lessees in Colorado and Utah have noncontiguous nonproducing leases that they intend to mine as part of their existing operations after the diligence date. Unless the requirement that all leases in the LMU be contiguous is modified or reinterpreted, a section 5 LMU could not include these noncontiguous areas and the lessee would probably shift production prematurely to the new area from other Federal leases.

Still other mines on Federal leases have very large reserves in multiple seams and could encounter the same difficulty in defining the LMU reserves for a section 5 LMU as described above for single lease LMUs. Reserves on some of these potential LMUs are so large that meeting the 2½ percent diligence production target could become a practical impossibility if all the lease reserves were included. These cases too will be addressed individually and could result in some seams being omitted from the LMU reserves or being relinquished.

Maximum Economic Recovery

Prior to enactment of the FCLAA in 1976, USGS conducted an informal monitoring program to ensure conservation of coal resources and prevent waste on Federal coal leases under the general authority of the Mineral Leasing Act to protect the public interest. Section 3 of FCLAA created a formal requirement for achieving the "maximum economic recovery" (MER) of Federal coal. The concept of MER "means that all portions of the coal deposits within the lease tract shall be mined that have a private incremental cost of recovery (including reclamation, safety and opportunity costs) less than or equal to the market value of the coal."[47] Beyond this general definition of the term MER, guidelines for determining what is required to meet MER have not been promulgated.[48]

FCLAA requires that MER be considered at three stages: 1) at the time the lease is issued; 2) when the mine plan is approved; and 3) on approval of a section 5 LMU. At the prelease stage, the USGS mining supervisor determines the mining method, e.g., surface, deep mining, etc., that is likely to yield the greatest recovery under given economic conditions. The prelease determination is based on a general examination of the tract and standard mining practices, and not a detailed seam-by-seam assessment. The premining assessment of MER, on the other hand, is expected to require a detailed investigation and the application of more specific engineering and economic evaluative criteria and may lead to modifications in the mine plan to ensure that MER is achieved. Before the Secretary can approve a petition for designation of a section 5 LMU combining one or more Federal leases with other Federal leases or with non-Federal reserves, he must find that the consolidation will serve maximum economic recovery of the coal resources.

Theoretically, the application of the MER requirement could lead to the extraction of marginal coal that was once left behind. The purpose of the MER standard was to prevent the possibility that operators on Federal leases would take only the most economically profitable coal seams and would leave the less profitable or marginal reserves in the ground. By requiring the lessee to average the costs of mining over all the economically recoverable coal under lease (thus offsetting the profit from mining high-grade reserves against the higher costs of taking marginal reserves) more coal is extracted, more royalties are paid, and less coal is rendered economically unrecoverable, Strict MER guidelines could result in larger estimates of LMU reserves, and therefore could affect the diligence and continuous development requirements for leases. MER determinations could also result in more complex mining plans, which would have a concomitant effect on the lessee's ability to comply with the time limits on diligent development. The nature of the MER concept makes it, in effect, a "continuing performance standard" that may require an operator to continue operating a Federal coal lease at marginal costs beyond the point where a lessee would cease mining in an unregulated operation.

The full extent of the impact of the concept of MER on Federal leases is unknown, since regulations implementing section 3 of the FCLAA have not yet been promulgated, and scope of its applicability to pre-FCLAA leases is uncertain.

Timeliness of Readjustment

Pre-FCLAA leases were originally subject to readjustment of lease terms at 20-year intervals. Section 6 of FCLAA reduced the readjustment period to 10 years. Consequently, when pre-FCLAA leases reach the end of their current 20-year term, each will be eligible for an extension of only 10 years. At readjustment, new lease provisions, including terms incorporating the requirements of the 1976 diligence regulations, are made part of the lease and the rentals and royalties are changed to conform to FCLAA. Current DOI practice is to set the new rental rate at $3.00/acre and the royalty rate at the statutory minimum of 12.5 percent of the sales price per ton for coal mined by surface methods, and at a lower discretionary rate of 8 percent for coal mined underground. For producing leases, the major impact of readjustment is financial—an increase in the royalty paid from (for example) $0.15/ton to perhaps $1.60/ton (assuming $20.00/ton for underground coal at eight percent). For undeveloped leases or leases in pending mine plans, if the diligence requirements are only effective on readjustment, the result would be differing diligence standards for pre-FCLAA leases. If diligence requirements for initiating production within 10 years are made effective only on readjustment, some lessees would still have to meet the 1986 deadline, while others, conceivably, would not have to produce until after the year 2000.

As a further complication, during the 1970's, many lease readjustments were delayed because of DOI personnel shortages and confusion over the applicability of various regulations due to litigation, legislation, and changes in the coal management program. At the end of fiscal year 1980, most of the backlog had been reduced and readjustments were pending for 40 pre-FCLAA leases.[49] A number of completed readjustments have been appealed to the DOI Board of Land Appeals and to the courts. Between January 1, 1981, and June 1, 1986, nearly 200 pre-FCLAA leases in the six Western Federal coal States are due for readjustment; another 191 of these leases are to be readjusted by June 1, 1991. At least 39 more pre-FCLAA leases will not be readjusted until after the 1991 diligence deadline (see table 78).

Table 78.—Readjustment Schedule for Pre-FCLAA Leases in Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming

State	Readjustments between Aug. 4, 1976 and June 1, 1986	Readjustments between June 1, 1986 and June 1, 1991	Readjustments after June 1, 1991
Colorado.	59	46	10
Montana. , ...	9	7	2
New Mexico.	18	9	1
North Dakota.	7	9	1
Utah	105	76	17
Wyoming	46	44	8
Total	244	191	39

Note Dates of readjustment obtained from Automated Coal Lease Data System. October 1980 The total readjustments do not include second readjustments of leases due to be readjusted after FCLAA (Aug. 4, 1976) or first readjustments of new leases issued after FCLAA

Because of these delays, some lessees have challenged DOI's right to readjust their leases. The lessees have argued that because DOI did not notify them of its intention to readjust their leases in a timely fashion before the expiration of the previous lease term, that DOI implicitly waived its opportunity to readjust their leases and that the leases continue for an additional term under the previous royalties and lease provisions. In some cases, this position may prevail depending on the specific facts, the anniversary date and the Department's actions relating to attempted readjustment. DOI has maintained that it has the authority to adjust leases even when the lessee was not notified on or before the 20-year anniversary date and to adjust leases with anniversary dates occurring before the passage of FCLAA to conform to the minimum royalties required by FCLAA. At least two Federal district courts have ruled against DOI on the issue; both cases have been appealed.[50] In the 1979 rulemaking for the new coal management program, the regulations governing readjustments were modified in response to industry comments. The regulations now provide that for leases which are subject to readjustment after June 1, 1980, if DOI does not notify the lessee before expiration of its present lease term of its intent to revise the lease, DOI will have waived its right to readjust the lease for the next lease term.[51]

Enforcement

The extent that diligence regulations are enforced will also influence their impact, Before promulgation of the regulations in 1976, DOI had not canceled any nonproducing leases. Before 1960 there had been little need for enforcing diligent development as most leases eventually went into production. However, in the 1960's, as coal production lagged while leased areage increased, the potential for using diligence requirements to stimulate development increased.

Before a pre-FCLAA lease is forfeited for not meeting diligence, a judgment must be obtained against the lessee. To do this, the Department of Justice must sue the lessee in Federal court at the request of the Secretary of the Interior. The decision to request enforcement action by the Justice Department is discretionary with the Interior Secretary, however, the final decision on whether or not to initiate a lawsuit is made by the Attorney General. It is likely that if DOI adopted an aggressive enforcement policy, the cases would be carefully chosen to establish a strong precedent, thus many weak or questionable cases could be deferred.

Under the Secretary's general discretionary authority to administer leases in the public interest, DOI can also waive violations of the Mineral Leasing Act and regulations either on its own initiative or through negotiations with the lessees. Generally, such waivers are not binding on DOI or the Government unless they are: 1) express, 2) written, and 3) executed by the appropriate official.[52]

Relinquishments

Some leases can be expected to relinquish their nonproducing leases voluntarily if they cannot meet diligence rather than go through court proceedings. Relinquishments must be found to be in the public interest.[53]

A significant factor affecting production potential from existing leases and the leases that are unlikely to meet diligence by 1986 is section 3 of the FCLAA that prohibits the issuance of new leases to lessees that have not produced commercial quantities from any existing leases they have held for 10 years by August 4, 1986.[54] This amendment to the Mineral Leasing Act creates a strong incentive to relinquish nonproducing leases if the lessee wishes to lease additional Federal coal reserves.

Potential Production From Federal Coal Leases and Diligence

In chapter 5 of this report, OTA presented the results of its comparison of the expected production from existing Federal leases with the minimum production levels required for diligence. This analysis, which assumed that the diligence requirements are fully applicable to existing leases, provides some indication of the situations that might arise.

By 1991, over 70 percent of the 502 leases in the six major Western Federal coal States could meet the existing diligence requirements.

- 216 leases with 7.4 billion tons of reserves are likely to meet diligence by 1986;
- 29 leases with 2.1 billion tons of reserves are likely to meet diligence by 1991 with extensions; and
- 112 leases with 3.4 billion tons of reserves are uncertain to meet diligence by 1991 with major uncertainties tied to delays in powerplant and transportation system construction, fluctuations in captive coal needs, and difficulties in defining the logical mining unit for leases with very large reserves in multiple seams.

Thirty percent of the Western Federal leases are unlikely to meet diligence by 1991 even with extensions:

- Production for 61 leases in the Kaiparowits Plateau with 1.4 billion tons of reserves is dependent on construction of a coal transportation system.
- Development of 10 leases in the Powder River basin with 1.4 billion tons of reserves are contingent on commercialization of synfuels technologies, such as in situ gasification, that can use lower quality reserves at the mine site.
- The remaining 74 leases are primarily small, scattered leases with poor quality reserves and are unlikely to be developed by 1991 even with extensions.

Most leases with potential for production by 1991 could qualify for extensions under existing guidelines. The exceptions are small- to medium-sized mines that are intended to serve spot markets and several underground mines opening in areas with difficult mining conditions requiring longer construction periods that do not fit clearly into any of the current guidelines.[55]

The 502 leases are divided into a total of 217 mine plans or blocks of contiguous leases; of these, 146 units could be producing by 1991 and many of these can be expected to request a section 5 LMU designation so that aggregate mine production can be used to meet diligence and with some exceptions should qualify as LMUs under current guidelines.

Exchanges

Exchange can be used to shift coal development on Federal or non-Federal lands away from areas where mining conflicts with other resource values or uses to more acceptable areas. Exchanges, thus can offset potential losses in coal production from environmental or land-use restrictions. Because of the requirement in section 2 of FCLAA that all new leases be awarded by competitive bidding, DOI has only a limited authority to offer unleased Federal coal in exchange for relinquishment of existing Federal leases or PRLAs in areas where mining poses environmental or other problems.

However, under general provisions of the Mineral Leasing Act, the Secretary can issue a noncoal mineral lease of comparable value, coal bidding rights, or modifications of up to 160 acres each to other coal leases in exchange for relinquishment of an existing coal lease or PRLA.[56]

Special legislation has been enacted specifically authorizing several proposed "lease swaps" involving existing Federal leases and PRLAs in Wyoming, Utah, and New Mexico and contested Indian leases and permits in Montana. Other existing Federal leases could qualify under the special alluvial valley floor exchange provisions in SMCRA.

Exchanges of Federal coal reserves for private coal lands have also been suggested. Under section 206 of FLPMA, DOI has the authority to exchange interests in Federal lands, including mineral rights, for interests in non-Federal lands of equal value if the exchange is determined to be in the public interest. Section 510(b)(5) of SMCRA directs the Secretary to establish a program of exchanges of non-Federal lands that cannot be mined because of alluvial valley floor restrictions for available Federal coal lands under section 206 of FLPMA.

According to information from OTA's State task forces, as much as 1.7 billion tons of Federal coal reserves are involved in various exchange proposals.[57] It is now apparent that not all of these exchanges will be completed, however, a significant portion of reserves that cannot be mined without substantial adverse social or environmental consequences could be replaced through the exchange mechanisms described below.

Special Exchange Legislation

Under special exchange legislation enacted by Congress, the Secretary of the Interior has been authorized to approve exchange relinquishments of certain existing leases and PRLAs and contested Indian leases and permits for new noncompetitive Federal coal leases. Generally, the Secretary must find that the exchange is in the public interest and that the value of the rights to be traded are approximately equal,

Public Law 95-554—Federal Coal Leasing Amendments Act of 1978

In the 95th Congress, DOI requested legislation giving it generic authority to exchange or condemn leases and PRLAs where mining poses environmental or other problems. Instead, Congress passed the Federal Coal Leasing Amendments Act of 1978 making minor amendments to the Mineral Leasing Act and specifically authorizing exchanges for all or part of nine leases underlying Interstate 90 and State highways near Gillette in northeastern Wyoming, and for eight PRLAs on the Kaiparowits Plateau in southwestern Utah.[58] The 1978 act also requested a feasibility study on the possible acquisition of private lands surrounding the Lake DeSmet Reservoir near Buffalo, Wyo., in exchange for Federal coal lands. The rights to be exchanged must be of approximately equal value, however, a cash settlement of up to 25 percent of the difference in value would be allowed.

DOI has completed the exchange studies under Public Law 95-554. In September 1979, it recommended against the Lake DeSmet exchange.[59] In June 1981, the Utah Power & Light exchange was rejected because the PRLAs to be exchanged were determined to be not of approximately equal value to the new lease tracts requested.[60] The Wyoming highway exchanges are proceeding and negotiations with the lessees are continuing on the leased areas to be relinquished in return for other Federal coal reserves.[61]

New Mexico Lease Exchange

Public Law 96-475[62] directs the Secretary of the Interior to issue leases for coal on other Federal land in exchange for all or portions of two Federal leases in the Bisti area of New Mexico. The exchange is to be completed within 30 months, i.e., by April 1983, or as expeditiously as possible. The Bisti lease area covers about 1,360 acres of the Bisti wilderness study area, as well as other areas with unusual paleontological, archaeological and recreational values.[63] The legislation specifically describes the unleased Federal coal lands that are to be offered in the exchange.

The exchange is to be made pursuant to the existing land use policies and leasing procedures established by the Secretary. The leases issued must contain the same terms and conditions as leases surrendered. The two leases are due to be readjusted before the exchange date and would thus be subject to post-FCLAA requirements.

The exchange involves two leases in the planned Bisti Mine. The lessee, Western Coal Co. had sought the exchange and agreed to defer exploration and mine construction activities in the areas pending administrative and legislative action. Processing of the exchange is not expected to delay development on the other Federal leases in the mine area.

Northern Cheyenne Indian Reservation Lease Exchange

Public Law 96-401 authorizes the Secretary of the Interior to negotiate for the cancellation of seven leases and 11 prospecting permits on Indian lands on the Northern Cheyenne Reservation in Montana.[64] The tribe has been contesting the BIA's issuance of these coal development rights covering over half of the tribal reservation. Development of the leases and permits was suspended by the Secretary of the Interior in response to the tribe's petition. The act would allow the Secretary to negotiate with the lessees and permit holders for cancellation of their rights in exchange for bypass leases on Federal coal adjacent to their active mines and for Federal coal bidding rights equal to the amounts that they have invested in the Indian coal rights. The act does not provide for a ton-for-ton or acre-for-acre exchange of Federal coal lands for the disputed tribal coal lands, but rather establishes a framework for the parties to negotiate a settlement and for the coal companies to recover their out-of-pocket expenses. The settlement authority in the act does not affect any legal rights that the parties may have. If they are unable to reach an agreement, the issues could still be litigated.[65]

Alluvial Valley Floor Exchanges

Section 510(b)(5) of the Surface Mining Control and Reclamation Act of 1977 requires that reserves on certain nonproducing Federal leases and private lands in alluvial valley floors with agricultural potential that cannot be mined, can be exchanged for Federal coal if the lessee made substantial legal or financial commitments to developing a mine before January, 1, 1977.[66] It is not yet known how much, if any, coal in alluvial valley floors will be exchanged under this provision intended to compensate mine owners and lessees who do not qualify for permit approval under the grandfather provisions of section 510(b)(5). In general, relatively small amounts of Federal lease reserves are likely to be affected by the prohibition on mining agriculturally important alluvial valley floors and the Federal reserves that would be eligible for exchange would be even smaller. (See the discussion of alluvial valley floors in ch. 10 of this report.)

Section 510(b)(5) also directs the Secretary to establish an exchange program under section 206 of FLPMA to trade title to available Federal coal lands for title to private lands that cannot be mined because of alluvial valley floors. This exchange of private lands for Federal reserves is mandatory and not subject to the requirement of previous substantial legal and financial investment.[67] There are a number of mines in the Powder River basin, with substantial reserves of non-Federal coal under alluvial valley floors that might qualify for these mandatory exchanges.

If significant amounts of reserves from these mines qualify, the net result could be a decrease in available unleased Federal reserves because of the transfers of Federal coal to non-Federal ownership in exchange for unminable non-Federal reserves in alluvial valley floors.

Other Exchanges

Under section 206 of FLPMA, DOI can exchange interests in Federal lands, including mineral rights, for interests in non-Federal lands of equal value if the public interest is well served by the exchange.[68] Cash settlement of up to 25 percent of the difference in value of the tracts exchanged is authorized. The alluvial valley floor coal exchanges are to be evaluated under this provision. Several exchanges of non-Federal coal lands for Federal coal lands have been suggested to preserve important wildlife habitat from mining, or to allow "blocking up" of checkerboard lands or other areas of dispersed mineral ownership so that both the Federal Government and the private owner receive title to contiguous LMUs as a result.[69] Exchanges of lands found unsuitable for mining under SMCRA have also been suggested; however, exchange of any Federal lease areas could only be accomplished by specific legislation.

DOI's limited experience with trying to implement the authorized exchanges discussed earlier has revealed technical and administrative difficulties involved in working out an exchange agreement acceptable to both parties. The difficulties in determining an appropriate value for the rights to be exchanged have been particularly troublesome in Utah and Wyoming where the reserves to be relinquished are of lower present economic value than the reserves sought in exchange. Even so, other leaseholders with reserves that cannot be mined can be expected to press for exchanges through administrative, legislative and judicial channels. Although all the coal reserves under existing leases may not be mined, the eventual result of exchanges could be little net change in the total amount of Federal coal reserves developed. The location of mining may change compared to present patterns of Federal lease ownership, but the amount of Federal reserves committed by past leasing practices could remain essentially the same.

Preference Right Lease Applications

Under section 2(b) of the 1920 Mineral Lands Leasing Act, prospecting permits could be issued for areas where commercial deposits of coal were unknown. The purpose of this provision, similar to prospecting permit provisions for other leasable minerals and to the location patent system under the mining law, was to encourage the exploration and development of mineral resources on public lands.[70] A successful prospector, upon showing discovery of a valuable deposit during the term of the permit, was entitled to a noncompetitive preference right lease. About half of the existing Federal coal leases were issued through the preference right lease mechanism.[71] Section 4 of the FCLAA repealed the authority to issue preference right leases except for PRLAs and prospecting permits pending on the date of its enactment.[72]

Potential Production From PRLAs

As of March 1981, there were 171 actively pending PRLAs covering over 395,000 acres and containing over 5,7 billion tons of recoverable reserves. OTA estimates that the potential production from these PRLAs is between 35 million and 60 million tons per year depending on how the various legal and environmental problems affecting certain PRLAs are resolved.[73] About 10 million tons of this annual production is associated with new mines on existing Federal leases in Colorado and New Mexico. This estimate is lower than the earlier DOI estimates of 186 million to 248 million tons per year used in development of the new coal management program and reflects: 1) a reduction in DOI's estimates of in-place reserves; and 2) OTA's analysis of the production potential of PRLAs in Wyoming, Colorado, and New Mexico. Even the lower production estimates for PRLAs indicate a significant potential for contributing to coal supply in 1990-95.[74]

The potential impact of the various legal, planning, and environmental restrictions on PRLA issuance and hence production was probably overestimated in the DOI review. OTA's examination of the data used in preparation of the working paper disclosed that most of the environmental restrictions were related to wildlife concerns and would probably result in special lease stipulations on impact mitigation rather than in deletion of reserves from the PRLA. The legal problems include some, such as incomplete applications, that are curable during the adjudication process under regulations allowing the applicant an opportunity to submit additional data.[75] Other legal problems such as failure to submit any information about the quantity and quality of reserves discovered probably would result in rejection, however, only a few applications did not contain this information, so the probable impact is small.[76]

The true potential production from PRLAs will not be known until after the pending applications have been processed and those that meet the legal requirements have been issued. With few exceptions, processing of the pending PRLAs was suspended during most of the past decade: first, because of the 1971 moratorium; then, to allow for development of new leasing policies; and, finally, by litigation.[77] Following promulgation of final regulations for the new coal management program in July 1979, processing of pending PRLAs was resumed. Under current policy, all PRLAs should be adjudicated and leases issued to qualified applicants by 1984.

Many of the legal, administrative, and procedural issues related to the issuance or rejections of PRLAs have been addressed by DOI and the courts, however, a number of new questions are likely to arise as the applications are processed and these must be resolved before the full production from PRLAs will be realized.

Procedures for Processing PRLAs

Before its repeal in the 1976 amendments, section 2(b) of the Mineral Leasing Act of 1920 provided:

> Where prospecting or exploratory work is necessary to determine the existence or workability of coal deposits in any unclaimed, undeveloped area, the Secretary of the Interior may issue, to applicants qualified under this chapter, prospecting permits for a term of two years, for not exceeding five thousand one hundred and twenty acres; and if within said period of two years thereafter the permittee shows to the Secretary that the lands contain coal in commercial quantities, the permittee shall be entitled to a lease under this chapter for all or part of the land in his permit.

A prospecting permit could be extended for 2 years; however, the approval of extensions was discretionary. In practice, they appear to have been granted routinely at the request of the permittee. In order to qualify for a preference right lease, the prospector had to submit an application accompanied by evidence showing the discovery of commercial quantities of coal within the permit area before the expiration date of the permit. The 1976 repeal was subject to valid existing rights, thus any pending permits or applications for preference right leases were not affected and could be pursued under pre-FCLAA requirements. Any leases issued would, however, be governed by new lease terms imposed by FCLAA.

As a result of an internal review of DOI procedures and criteria for issuing prospecting permits and approving PRLAs, new regulations were issued in May 1976 governing all pending and future PRLAs.[78] The regulations formally defined the standards for determining "commercial quantities" under the Mineral Leasing Act, specified the information to be submitted, and established a two-phase adjudication procedure, The internal review had disclosed that, in some instances, the less stringent "workability" standard had been used mistakenly to determine whether a PRLA should be issued rather than the stricter "prudent person" test.[79] The regulations formally adopted the "prudent person" standard applied under the Mining Law as the appropriate test for determining discovery of commercial quantities of coal under the Mineral Leasing Act.

The commercial quantities standard requires that "the coal deposit discovered . . . shall be of such character and quantity that a prudent person would be justified in further expedition of his labor and means with a reasonable prospect of success in developing a valuable mine. " The applicant must present "sufficient evidence to show that there is a reasonable expectation that revenues from the sale of the coal shall exceed the cost of developing the mine and extracting, removing, transporting, and marketing the coal. " Mining costs include expenses for environmental protection, reclamation, and compliance with applicable State and Federal laws and regulations.[80]

Under the new adjudication procedure, the application was to be accompanied by an "initial showing" with reserves estimates and supporting geologic data, maps, and a description of the proposed mining operation. Holders of pending PRLAs were notified to supplement their applications with the required initial showing. (Table 79 shows the adjudication steps in processing PRLAs.) The application and initial showing are first examined for completeness and compliance with other Mineral Leasing Act requirements. Incomplete or insufficient applications can be rejected at this stage, however in many instances, the applicant will be given an opportunity to supplement or correct the missing data. If the PRLA is rejected then or later in the process, the decision can be appealed administratively to the Interior Board of Land Appeals.[81]

The initial showing is followed by a technical examination and environmental assessment from which proposed lease terms and stipulations are formulated. This review will normally be conducted during the ongoing BLM land use planning cycle established by each State BLM Office, unless the lessee requests an accelerated review. The environmental assessment includes a site-specific analysis to evaluate the suitability of the area for mining and to develop appropriate lease stipulations, consultation with State government, and preparation of either an environmental assessment (EA) document or an EIS as required under NEPA. The Geological Survey reviews the adequacy of the initial showing and recommends lease terms and conditions and bonding, MER, and minimum production requirements for diligence.

The applicant is then provided with the proposed lease terms and stipulations (including rentals and royalties), the EA or EIS, and other relevant information and allowed 90 days to submit a "final showing" of commercial quantities. The final showing must include the applicant's estimated production, estimated revenues, and mining and reclamation costs. The estimates must have a reasonable factual basis and reflect all costs that a prudent person would consider before deciding to develop a mine. It must demonstrate that the deposit can be profitably mined and marketed under the proposed lease terms and applicable State and Federal laws. If all the requirements of the final showing are satisfactorily met, the applicant is entitled to a lease.

Litigation Involving PRLAs

NRDC v. Berklund

In March 1975, the Natural Resources Defense Council and the Environmental Defense Fund sued DOI seeking: 1) a declaratory judgment that the Secretary had the discretionary authority to refuse to issue a PRLA on environmental grounds under the Mineral Leasing Act of 1920 and National Environmental Policy Act of 1969, and that an environmental

Table 79.—Processing Preference Right Lease Applications

Review of application and initial showing	
1. Review completeness and adequacy of application.	**Reject PRLA** for failure to meet MLA requirements if: —Not filed before prospecting permit expired; —Not signed by qualified applicant; —Advance rental not paid; or —Evidence of discovery of commercial quantities not submitted.
2. Review completeness of initial showing.	**Reject PRLA** if: —Initial showing not filed; or —Initial showing not timely filed.
3. Determine whether PRLA conflicts with valid mining claims.	Delete areas covered by valid mining claims located before Multiple Mineral Development Act (1954) and the date prospecting permit was issued. (Claims must be filed with BLM as required by FLPMA to be presumed valid); notify applicant of conflict and of procedures for contesting validity of adverse mining claims.
4. Request additional information needed for initial showing and mining claims reviews.	
5. Determine adequacy of initial showing.	**Reject PRLA** if: —Initial showing fails to show any coal or such limited reserves or low quality coal that mining could not be expected to take place; or —After deletion of mining claims, initial showing fails to show sufficient reserves remaining to sustain proposed commercial development. **Accept initial** *showing* if all requirements are met; refer application for technical review and environmental assessment.
Technical review and environmental assessment	
1. Establish priority for review of PRLA in land use planning process.	Schedule accelerated review on applicant request.
2. Conduct environmental analysis including unsuitability criteria.	Prepare environmental assessment (EA) or draft environmental impact statement (EIS).
3. Review adequacy of EA or EIS; consult with Governor, Surface Management Agency, other agencies, and public. Issue final EAIEIS.	Request comments on adequacy of EAIEIS, proposed lease terms, stipulations. Hold public hearing. Prepare final EA/EIS.
4. Set proposed lease terms, conditions, rental, royalties, bonding, MER, and minimum production requirements.	
5. Request applicant to submit "final showing" of commercial quantities.	
Review of final showing	
1. Determine completeness of final showing.	**Reject PRLA** if applicant fails to submit final showing. Request additional information needed for final showing.
2. Determine whether applicant meets commercial quantities test.	Has applicant demonstrated discovery of a coal deposit of such character and quality that a prudent person would be justified in further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine with a reasonable expectation that the revenues from the sale of the coal will exceed the costs of developing the mine **and** extracting, removing, transporting, and marketing the coal? (NOTE: Applicant may delete areas that are recommended as unsuitable for mining from application before final showing to exclude costs of mining these areas.)
3. Issue final decision on PRLA.	**Accept PRLA and issue lease** if applicant meets all requirements and commercial quantities test. **Reject PRLA** if applicant does not meet commercial quantities test on final showing. *Negotiate* with applicant for exchange of PRLAs that meet commercial quantities test but pose environmental or other problems if developed.

SOURCE. Bureau of Land Management, Instruction Memorandum 79-846 (revised), Solicitor's Opinion M-36893, as revised, Jan. 8, 1981.

impact statement must be prepared before issuance of any PRLA that involved a "major Federal action significantly affecting the environment;" and z) an injunction barring the issuance of any such leases without complying with the declaratory judgment provisions sought.

In June 1978, the District Court of the District of Columbia held: 1) that the Secretary has no discretion to reject a PRLA if the applicant successfully meets the commercial quantities test and other requirements of the Mineral Leasing Act; and 2) that NEPA requires the preparation of an EIS before the issuance of any lease where such action is "a major Federal action significantly affecting the environment."[82]

In reaching its decision the court further noted that NEPA requires the Secretary to "exercise his authority to safeguard society and prevent irreparable damage to the environment through a careful and complete formulation of lease terms."[83] The court observed that the Secretary has broad powers to establish strict standards for proposed lease terms that could make compliance with the commercial quantities test difficult or impossible (i.e., the cost of implementing these terms would make the mining costs exceed the market value of the coal). Thus, while DOI cannot deny a PRLA solely for failure to meet environmental requirements, the court stated that "if a permittee does not have the technological capability to comply with (strict environmental) standards, the high cost of compliance will outweigh potential coal revenues and he will fail the commercial quantities test, "[84]

In preparing an EIS prior to the issuance of a PRLA, the Berklund court ruled that the Secretary must consider at least three alternatives: 1) exchange of the PRLA for a mineral lease of comparable value or coal bidding rights;[85] 2) issuance of the lease with lease terms to protect against irreparable damage to the environment as required by NEPA, which will determine whether the permittee will meet the commercial quantities test, which in turn will determine whether the lease will be issued; and 3) if the applicant will not agree to an exchange and the lease terms do not defeat the commercial quantities showing, withdrawing the lands or asking Congress for legislation canceling the lease on payment of just compensation.[86]

By clear implication, the decision upheld the application of the 1976 commercial quantities regulations. The decision was affirmed by the U.S. Court of Appeals in November, 1979.[87]

Utah International Inc. v. Andrus (Utah)[88]

Utah International, Inc., sued DOI seeking a judgment that the May 1976 PRLA adjudication procedures and commercial quantities regulations could not be applied to its southern Utah PRLA which was filed before they were effective and also seeking to have court rule that any lease issued from its PRLA would have lease terms in effect on date of application rather than post-FCLAA requirements. The Utah Federal district court held that the 1976 regulations were proper and could be made applicable to pending PRLAs; and that an applicant does not acquire a vested right to a lease or to have its application judged under a particular standard simply by filing an application. The court further ruled that an applicant could not sue over the application of the commercial quantities test to its PRLA until after DOI had made a final decision approving or rejecting the application and the applicant had all exhausted administrative appeals in DOI.

Utah International *Inc. v.* Andrus (Colorado)[89]

Utah International, Inc., also sued DOI over processing of a PRLA in Colorado—this time with more success. The Colorado Federal district court decision cited the result in the Utah case with approval, noting that it is within the authority of the Secretary to act to correct errors in the administration of programs committed to his discretion, thus it was proper to issue new regulations for processing PRLAs and to establish a corrected commercial quantities test fully applicable to pending applications, The Colorado court then distinguished the PRLA in the case before it from other PRLAs by finding that DOI had made a final and binding determination of discovery of commercial quantities on the PRLA in 1970 before the effective date of the new regulations. Having made a final decision, DOI could not subsequently reopen the case to apply its later requirements. DOI was ordered to process the application. The court further held that the applicant, Utah International, was not entitled to the lease terms in effect when its application was approved, but rather the Secretary had full discretion to set the terms and conditions of the lease. The case was appealed by both DOI and the plaintiff, Utah International. Its value as precedent for other PRLAs is limited since the decision was based on the specific circumstances of the case.

Other Legal and Administrative Issues Related to PRLAs

Unclaimed Land

Under the 1920 Act, prospecting permits and preference right leases could be issued only on "unclaimed, undeveloped" lands. A 1977 Solicitor's Opinion (Solicitor's Opinion No. M-36893), interpreting the meaning of "claimed" as any land on which a valid mining claim had been filed under the Mining Law of 1872 and was present at the time the prospecting permit was issued, raised the prospect that many pending PRLAs would be invalid in those areas in which they overlapped mining claims.

In response to the Opinion, in August 1977, PRLA holders were asked to submit a "certified abstract of title" within 160 days listing previous mining claims affecting land within their PRLAs.[90] A review of the submitted abstracts revealed that lands encompassed by 20 PRLAs were covered in part or in whole by a total of 465 mining claims that had been issued prior to the coal prospecting permits. Most of these PRLAs are in Wyoming, where 14 out of 72 applications, covering 25,586 acres include one or more mining claims. One application had 239 mining claims. Most of these claims are for uranium minerals.

On November 19, 1979, the Solicitor issued a Supplemental Opinion on the effect of the August 1977 Opinion on the processing of pending PRLAs. The Supplemental Opinion concluded that prospecting permits previously issued in "claimed" or "developed" areas are void and clarified the meaning of the terms "unclaimed" and "undeveloped" under the Mineral Leasing Act. The term "unclaimed" refers to the absence of valid mining claims. The term "undeveloped" means the lack of surface mineral activities associated with the delineation of an ore body or mineral resource which could reasonably be expected to disclose knowledge of an area's coal or phosphate potential. The Supplemental Opinion also noted that holders of PRLAs "have an opportunity through private contests, submission of evidence of an area's status, or by rebutting a show cause order, to show that the lands under application were 'unclaimed, undeveloped' at the time of prospecting permit issuance."[91]

Review of the Solicitor's Opinion on unclaimed areas resulted in a third opinion issued January 8, 1981. This third opinion concluded that only claims filed before enactment of the Multiple Mineral Development Act of 1954 could adversely affect PRLAs, The opinion further concluded that it is sufficient to only check BLM land office records for evidence of mining claims thus allowing DOI to dispense with the requirement for certified abstracts.

The results of this third Solicitor's Opinion on the "unclaimed, undeveloped" issue could make processing of PRLAs simpler and could result in some PRLAs being approved although they might contain conflicting mining claims for other minerals. The Multiple Mineral Development Act of 1954 provides that mining claims located after the date of its passage do not carry with them the right to leasable minerals, including coal.[92] Thus, location of a mining claim after that date does not create a claim that is adverse to the rights of a coal lessee and, in fact, the Government may lease the coal, phosphate, oil, and gas, and other leasable minerals on these lands. The PRLA records examined by OTA do not indicate when the mining claims that potentially conflict with the PRLAs were filed. However, it is likely that many of the uranium claims were located after the passage of the 1954 Act and thus could not result in a conflict with any coal prospecting permits.

The elimination of the requirement for submission of certified abstracts makes use of provisions of the Federal Land Policy and Management Act of 1976. Section 314 of FLPMA requires that holders of unpatented mining claims file information on the location of their claim and an affidavit of assessment work performed with the BLM by October 21, 1979, and annually thereafter.[93] Failure to file this information is deemed conclusively to constitute abandonment of the claim. Before this provision was enacted, there often was no feasible procedure available to BLM or the prospector to determine the presence of mining claims on lands covered by applications for prospecting permits.

If the third Solicitor's Opinion is implemented, the portions of a PRLA covered by valid prior claims will be deleted from lease consideration. This would reduce the lease acreage of some PRLAs and perhaps completely disqualify others. In Wyoming, PRLAs with mining claims contain over 600 million tons of reserves, and 15.5 million tons out of 20,5 million tons potential production capacity from PRLAs could be affected by these claims. Whether issuance of a preference right lease is affected by the presence of mining claims depends on: 1) how much of the PRLA is covered by claims; 2) whether the claims were filed before 1954; 3) whether the claims have been kept valid through the required work requirements at least up to the time the prospecting permit was issued; and 4) whether the mining claim holder has made the required filing with BLM.

Existence and Workability of Coal Deposits

Preference right leases were awarded only for those lands where commercially valuable coal deposits were not known to occur. Prospecting permits were issued under the Mineral Leasing Act of 1920 where prospecting or exploratory work was necessary to determine the existence or "workability" of coal deposits. If the permittee could show that land contained in coal in "commercial quantities, " the permittee was entitled to a preference right lease for the vacant, unappropriated lands described in the prospecting permit.

The concept of workability for coal preference right leases is similar to the "valuable deposit test" that applies to other minerals and is the same as the commercial quantities test in the current coal regulations.{" To qualify, the land must be found to contain "coal of such quantity and quality as would warrant a prudent coal miner or operator in the expenditure and labor incident to the opening and operation of a coal mine or mines on a commercial basis."[95] In other words, "a permittee must have found a deposit upon which a prudent man would expend his labor and means (a workable deposit) and that to meet this test, commercial quantities of coal must be found. "

In deciding whether a prospecting permit could be issued, USGS also used a classification standard of workability that assumed that the coal deposits were marketable and which focused on whether the known physical characteristics of the coal deposits indicated that the value of the coal was greater than the costs of extraction. This less stringent classification standard of workability was for some years mistakenly used to determine whether a permittee was entitled to a lease.[96] This misunderstanding was corrected by DOI in the 1976 commercial quantities regulations. This confusion over the correct application of the workability test raised questions about whether some lands had correctly been open to prospecting.

Some environmental groups have argued that some prospecting permits in Wyoming were issued on lands with abandoned underground mine workings or surface coal outcrops and that such lands should have been classified as areas with known coal deposits. Issuance of prospecting permits in such areas would violate the statutory requirement that known deposits must be leased competitively.[97] However, in 1979 in rulemaking for the new coal management program, DOI rejected a proposal to reexamine PRLAs for errors in determining the presence of known deposits. 1)01 "will continue to give these determinations a presumption of administrative regularity;" however, "if a case file does not contain the required conclusion by USGS that a prospecting permit could be issued then the presumption of administrative regularity does not apply," and DOI "will examine in such a case whether the permit was properly granted."[98]

Unsuitability for Mining

Pre-FCLAA leases can be affected in two ways by current requirements and procedures relating to the environmental unsuitability of lands for coal mining: 1) under sections 510 and 516 of the Surface Mining Control and Reclamation Act of 1977, performance criteria for mining must be considered before a mine plan is approved, and if the impacts cannot be mitigated the plan may be rejected; 2) mining on a pre-FCLAA lease may be foreclosed if it is within an area that is designated unsuitable for mining as a result of the petition process established in section 522(a) of SMCRA.[99]

BLM land use plans and coal lease tract selection include the consideration of suitability criteria for the medium and high potential coal lands in each BLM district planning area. Lands that are not unsuitable are considered further in the land use planning and coal leasing process. Suitability criteria are also applied by OSM to each nonproducing pre-FCLAA lease when a mining and reclamation plan is submitted. Before permit approval OSM consults BLM for special stipulations or recommendations on the suitability of leased areas for the proposed mining operation. The impact on pre-FCLAA leases has been relatively small, although the status of several hundred million tons of reserves in the Powder River basin potentially could be affected by alluvial valley floor restrictions (see ch. 10 for further discussion). Overall, the impacts of unsuitability criteria and the designation of lands unsuitable for mining are not are not expected to impair the ability of existing Federal leases to meet the possible range of demand for Western coal in the next 10 to 15 years.

Federal lands unsuitability criteria have two major sources: First, an order issued by President Carter in May 1977 directing the Secretary of the Interior to lease coal only in areas "where mining is environmentally acceptable and compatible with other land uses" and to review existing leases for compatibility with these standards, and to take the necessary steps under existing law to deal with nonproducing, environmentally unsatisfactory leases and applications.

Second, the Surface Mining Control and Reclamation Act of 1977 (SMCRA) requires the Secretary of the Interior to review all Federal lands to identify any areas unsuitable for surface coal mining operations. Standards of unsuitability in section 522 of SMCRA focus on environmentally sensitive areas or areas which are classified for other uses, such as national parks or wilderness areas. Other Federal statutes impose additional responsibility on the Federal Government to protect endangered species, historic and culturally significant sites, etc.; these were also included in the suitability criteria. The unsuitability review includes a process for public participation that considers matters of local or State significance and a procedure for private surface owners to withhold consent for new Federal coal leases.

Under the July 1979 coal management regulations, unsuitability criteria for new coal leases are applied during the land use planning process in order to identify those areas requiring special stipulations to provide necessary protection from adverse impacts of mining. These criteria apply to all surface minable areas and also to underground mines if mining would unduly disturb the surface, cause subsidence or interfere with surface occupancy. Exceptions to these criteria are permitted to protect valid existing rights or substantial legal and financial commitments made by operators before enactment of SMCRA. In some instances, the criteria extend to buffer zones around protected areas, such as those listed in the National Register of Historic Places, endangered species habitats and lands with National Resource Waters on site. Section 522 criteria also apply to mine plans; if sufficient data are not available to determine the minability at the time of leasing, the issue will be resolved at the mine plan approval stage.

Designation of Lands Unsuitable for Mining: Section 522(a) of SMCRA establishes a procedure for petitions to designate lands unsuitable for mining. An unsuitability designation is mandatory if required reclamation is not technically or economically feasible. SMRCA also provides for Federal or State agencies to designate land unsuitable for mining as a matter of discretion based on a review of the petition if:

1. mining is incompatible with existing State or local land use plans;
2. mining could result in significant damage to important historic, cultural, scientific and esthetic values and natural systems on fragile or historic lands;
3. mining of renewable resource lands results in substantial loss or reduction of long-range productivity of food or fiber products and water supply; and
4. mining of natural hazard lands (such as areas subject to frequent flooding and areas of unstable geology) could substantially endanger life and property.[100]

The petition process forces consideration of the cumulative environmental impacts of surface mining that may be overlooked or inadequately analyzed in the application of unsuitability criteria during individual mine plan review. It also allows examination of environmental issues that are not specifically addressed in requirements for mine plan review, such as the impacts of mining on national parks.

By June 1981, two petitions had been filed in the West to designate lands unsuitable for mining; one in the Alton area of southwestern Utah and the other in the Tongue River Valley of southeastern Montana.

The Alton Petition

On November 28, 1979, the Environmental Defense Fund, Friends of the Earth, Sierra Club, and seven residents of the Alton area in southwestern Utah petitioned the Secretary of the Interior to designate certain Federal lands near Bryce Canyon National Park and Dixie National Forest as unsuitable for surface coal mining, Approximately 325,200 acres, or slightly more than 500 square miles, were affected, including 29 Federal leases covering over 26,000 acres containing about 290 million tons of surface minable coal reserves, 100 million tons of recoverable underground reserves, and two PRLAs covering 2,398 acres. The major allegations in the petition dealt with the technological and economic feasibility of reclamation, potential damage to surface and ground water systems and potential damage to the unique values of the park and national forest.

The final EIS on the petition, issued by OSM in November 1980, did not support the claims that: 1) the Alton land could not be reclaimed; 2) blasting from mining would damage geologic formations; 3) wildlife would be threatened; and 4) mining would cause irreparable damage to water supplies. It did note that these issues would be reexamined as part of the permit approval process and that appropriate stipulations could be required should additional information reveal any such adverse problems. The EIS did find that mining in part of the area would impair scenic vistas from Bryce Canyon National Park and that high noise levels would occur in some areas within the park. In December 1980, the Secretary of the Interior declared 9,049 acres containing approximately 24 million tons of coal near Yovimpa Point in Bryce Canyon National Park as unsuitable for mining because of the adverse impacts on the

84-141 O - 81 - 18 : QL 3

park. The decision stated that mining activities would significantly reduce visibility and scenic vistas from the park overlooks and would raise noise levels thus damaging the values for which the park was established and diminishing the experiences of the park visitors. In support of his decision, Secretary Andrus also cited his responsibility as the steward of the national parks "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."[101]

The decision left the two main leaseholders in the petition area, Utah International and Nevada Electric Investment Co. approximately 16,700 acres under lease containing 266 million tons of coal to supply the proposed Allen-Warner Valley Energy System or other projects.

Utah International challenged the decision in Federal court alleging that its leases should be exempt from unsuitability designation because of substantial legal and financial commitments undertaken by the lessees before SMCRA was enacted. The petitioners, the Environmental Defense Fund (EDF), also appealed the decision, alleging that the Secretary failed to consider adequately the effects mining would have on the national park and on the regional water supply. If EDF's suit results in expanding the area unsuitable for mining, there could be a significant impact on coal production from the area. Up to now, however, the potential for coal production from the leases in the area has not been significantly impaired even though 12 of the 29 leases in the area are affected, in whole or in part, by the Secretary's decision. The impact of the decision is probably limited to its unique circumstances since few, if any, other existing leases border on national parks. 102

The Tongue River Petition

In November 1980, the Northern Plains Resource Council and three of its affiliates, the Tri-County Ranchers Association, the Rosebud Protective Association and the Tongue River Agricultural Protective Association filed a petition with the Montana Department of State Land and OSM to designate approximately 100 thousand acres of intermingled Federal, private, and State lands in the Tongue River Valley in southeastern Montana unsuitable for surface mining. The major allegations in the petition are that thin topsoils and indigenous salts make reclamation technologically and economically unfeasible, and that strip mining could damage water supplies and the long-term productivity of farmlands. The area in the petition includes an estimated 10 billion tons of strippable coal and includes the proposed non-Federal Montco Mine that has a projected production capacity of 12 million tons per year by 1990. Substantial amounts of Federal coal are located in the area, but there is no currently leased Federal coal in the area, so the petition will not have any significant impact on the development of existing Federal leases in Montana. The petition was found to be complete and the allegations are now under review by the State of Montana and DOI,[103] Final decision on non-Federal lands rests with the State; the decision of Federal lands suitability will be made by DOI. A decision on the petition will be made by December 29, 1981.

Footnotes for Chapter 9

[1]For a description of the public land disposal laws and the origin of split ownership problems in the West, see Management of Fuel and Nonfuel Minerals in Federal Lands, Office of Technology Assessment (OTA-M-88), April 1979, p. 86,

[2]30 U.S.C. 1304, SMCRA narrowly defines the surface owners to which the consent requirement applies. A ''qualified surface owner" is a natural person (or a corporation controlled by a natural person) who: 1) owns legal or equitable title to the land surface, and 2) either lives on the land or personally farms the land or derives a substantial portion of his income from such farming or ranching operation, and 3) has met the previous conditions for 3 years before granting consent.

[3]See discussion of Coal Lands Act in Management of Fuel and Nonfuel Minerals in Federal Lands, supra note 1, pp. 86-89.

[4]Act of Feb. 25, 1920,41 Stat. 438.

[5]G. Bennethum. Holdings and Development of Federal Coal Leases (Washington, D, C.: Bureau of Land Management, 1970). There was four times as much coal acreage under lease in 1970 than there was in 1960. See chs. 3 and 13 of this report for history and extent of coal leasing from 1950 to 1980.

'Secretarial Order No, 2952, Feb. 13, 1973.

'Two reports that were widely quoted in these hearings were: J. Cannon, Leased and Lost; A Study of Public and Indian Coal Leasing in the West [New York: Council on Economic Priorities, 1974), and U.S. General Accounting Office, Improvements Needed in Administration of Federal Coal Leasing Program, 1972.

[8]Federal Coal Leasing Amendments Act of 1976, Public Law 94-377, 90 Stat. 1083, Aug. 4, 1976. In 1976, the House of Representatives approved S. 39 I by a vote of 344-51, and the Senate accepted the House amendments by unanimous vote. President Ford vetoed the bill on July 3, 1976. [Weekly Compilation of Presidential Documents, vol. 12, July 3, 1976.) The Congress overrode the President's veto. The Senate vote was 76-17, 122 Cong. Rec. 25198, at 25465 (Aug. 3, 1976); the House of Representatives was 315-86, 122 Cong. Rec. H831O-H832O (Aug. 4, 1976).

[9]The Draft Environmental Impact Statement on the Proposed Federal Coal Leasing Program issued by DOI in 1974 proposed an "Energy Minerals Allocation Recommendation System" in which leasing would be based on a Federal coal allocation model. The Final Environmental Statement on the Proposed Federal Coal Leasing Program issued in 1975 described a different system, the "Energy Minerals Activity Recommendation System, " described above. Since both systems have the same acronym, they have sometimes been referred to as "EMARS I" and "EMARS II. "

[10]NRDC v. Hughes, 437 F. Supp, 981 (D.D.C. 1977]; order modified, 454 F. Supp. 149, 1978,

[11]See 437 F. Supp. 981,993.

[12]Specifically the settlement authorized leasing in four circumstances: "bypass," i.e., leases in which Federal coal might otherwise be lost if not developed by an existing mine; hardship (involving seven named lease applications); employment (leases issued to maintain production and employment in mines existing on Sept. 29, 1977); and leases for certain experimental DOE projects (i.e., projects authorized under sec. 908 of SMCRA 30, USC 1328 to conduct and promote research, experiments and demonstration projects relating to alternative coal mining technologies). Exchanges of Federal leases in alluvial valley floors under sec. 510(b)(5) (30 U.S. C. 1260(b)(5]) of SMCRA were also allowed. The Order expired before the PRLAs were processed and adjudication of these applications is being conducted under new coal management regulations issued in 1979. See supplemental opinion NRDC v. Hughes, 454 F. Supp. 48 (D.C. 1978).

[13]The draft programmatic statement for the Federal Coal Management Program was issued for review in December 1978; the final statement was filed in April 1979.

[14]Pub]ic Law 94-377, 90 Stat. 1083, Aug. 4. 1976.

[15]43 U.S.C. 1701 et seq.

[16]44 F.R. 42583, July 19, 1979.

"''Multiple use" means the combination of resource values that consider changing needs and conditions, long-term needs for both renewable and nonrenewable resources, land productivity, environmental values, and economic return (43 U.S,C, 1702(c)). "Sustained yield"' means the achievement and maintenance of high output of public lands natural resources consistent with multiple use (43 U.S. C. 1702(h)). See also 43 U.S. C. 1701(a)(9).

[18]42 U.S.C. 7 152(b).

[19]Trust Co. v. Samedan Oil Corp., 192 F.2d 282, at 284 (10th Cir. 1975). The conditions of diligent development and continued operation are traditional in mineral leases and under common law the meaning of diligent development evolved with slightly different meanings for different minerals. Much of the common law which defined diligent development resulted from oil and gas leases in which conditions and expectations for diligent development are quite different from coal leases because the existence of commercially producible oil and gas is usually not known. The discussion of diligent development here focuses on the concept as it applies to coal leases. A recent Texas case involving private leases with an indefinite lease term held that a coal lessee has a duty to develop the leased lands within a reasonable period of time unless the lease specifically sets out the scope of the lessee's duties—such as initiation of production within a specific period of years. See Cleghorn vs. Dallas Power & Light Co., 611 S.W. 2d 893 (Tex. App. 1981) (Texas Ct. of Civ. App., Jan. 21, 1981).

[20]The Mineral Leasing Act of 1920 allowed the DOI to accept advance royalty payments in lieu of requirements for continued operation. The DOI issued coal leases permitting payment of royalties in lieu of continued operations, but until 1973 had effectively nullified the minimum royalty requirements by setting the minimum royalty equal to the annual rental (i. e., no additional payments beyond the normal rental rates were required). There are a few leases that were issued between 1973 and passage of the 1976 FCLAA that require payment of advance royalties based on a predetermined rate of production for the sixth and succeeding years of the lease (Office of Technology Assessment, Management of Fuel and Nonfuel Minerals in Federal Land: Current Status and Issues, Washington, D. C.: OTA, 1979).

[21]See 41 F.R. 21779, May 28, 1976, In considering passage of FCLAA, Congress was aware of the diligence requirements for production on existing leases within 10 years in the proposed and final regulations. Among the reasons cited for vetoing FCLAA, President Ford said that the May 1976 regulations made many of the provisions of the Bill unnecessary. See Statement of Representative Mink at 122 Cong. Rec. H8311, at H8312 (daily cd.) Aug. 4, 1976.

[22]41 F. F/, 56643, Dec. 29, 1976.

[23]Public Law 95-51, sec. 302(b), 91 Stat. 579: 42 U.S.C. 7152(b).

[24]Public Law 94-377, 90 Stat. 1083, 30 U.S.C. 201(a)(2)(A). The language in sec. 3 of FCLAA is very broad, and, given a strict interpretation, would bar the issuance of any new leases

for coal or for oil, natural gas, or other minerals under the Mineral Leasing Act to any coal lessee who continues to hold a lease for 10 or more years without producing coal in commercial quantities. The section provides that "The restriction does not apply if production on the lease has been suspended under 30 U.S.C. 207(b), as amended, because of strikes, the elements, or casualties not attributable to the lessee. "

[25]43 CFR 3400.0- 5(cc).

[26]43 CFR 3475.5(a)

[27]30 U.S.C, 207(b) and 30 U.S,C. 209.

[28]According to 30 U.S.C. 207(b), post-FCLAA lessees are subject to the conditions of diligent development and continuous operations except when operations are interrupted because of strikes, the elements, or casualties not attributable to the lessee. However, the final sentence in the subsection provides that nothing in this subsection (207(b)) shall be construed to affect the requirement in subsection (a) that leases not producing at the end of 10 years shall be terminated. This proviso has been interpreted to mean that no extensions of any kind are available for post-FCLAA lessees. However, FCLAA did not restrict the Secretary's authority in sec. 39 of the Mineral Leasing Act (30 U.S. C. 209) to suspend the operation of any lease in its entirety in the interests of conservation. The Secretary could suspend the term of a lease, and the diligence obligation, under the general authority of sec. 39. Thus, providing some delay in the running of the diligence clock for post-FCLAA lessees. (Sec. 14 of FCLAA did amend sec. 39 slightly, by limiting the Secretary's authority to waive, suspend, or reduce advance royalties paid in lieu of continued operation of a lease.) See "Discussion Paper: Existing Leases and PRLAs," in U.S. Department of the Interior, Final Environmental Statement on the Federal Coed Management Program, app. I at p. I-26, 1979.

[30]See 43 CFR 3475.4(b)(2). On Feb. 1, 1980, proposed guidelines for deciding on applications for discretionary extensions under this regulation were published for comment. 45 F.R. 7138. In January 1981 final guidelines were approved by Under Secretary Josephs of the Carter administration. As of May 1981, the Reagan administration had not yet decided whether to adopt these guidelines.

[31]43 CFR 3473.4(d).

[32]Advance royalties were required of all leases on adjustment under 1976 pre-FCLAA regulations (since rescinded). The pre-FCLAA advance royalty regulations might have had a significant effect on lease development. Had these regulations remained in force, the schedule for advance royalty payments in 1990 for 249 currently undeveloped leases with no mine plans, assuming that none of these leases were producing, could have been over $200 million. This is more than 9 times the $24.6 million paid in coal royalties in 1979. This estimate assumes that all leases would be readjusted and uses an average royalty rate of $1.25/ton (12.5 percent royalty per ton paid on an average price per ton of $ 10.00). The annual production schedule for applying advance royalties to the 249 undeveloped leases would be $165 million tons (6.6 million tons of recoverable reserves divided by 40 years resulting in annual payments of $206 million. This amount would probably have been significantly higher than the royalties paid on actual production to meet the l-percent annual production rate for continuous operations,

[33]See 43 CFR 3473.3-2(b).

[34]30 U.S.C. 188.

[35]In such proceedings, the interpretation of the law by the agency charged with enforcing it is given great weight although it is not necessarily controlling. The lessee can also raise various defenses to the action and to the application of DOI's diligence standard to his lease. Thus, even if the lessee does not meet DCI's diligence requirements. the final decision on the facts and the law will be made by the court.

[36]"We believe that the Secretary has the discretion to establish standards such as these for lease cancellation. The standard described in 3523.2-1 clarifies those conditions that would not be considered when a lessee applies for an extension to avoid lease cancellation." 41 F.R. 21780, May 28, 1976. The current regulations on cancellation of leases (43 CFR 3452.2-1(c)) list a number of adverse circumstances that will not be considered in deciding whether to cancel a lease. The circumstances listed are essentially the same as those listed in 43 CFR 3475.4(b)(l) as conditions that are not extraordinary, and hence do not qualify for extensions of diligent development deadlines. These conditions include: 1) normally forseeable business risks such as fluctuation in prices, sales, or costs, including foreseeable costs of complying with requirements for environmental protection; 2) commonly experienced delays in delivery of supplies or equipment; or 3) inability to obtain sufficient sales. The preamble to the Dec. 29, 1976 final regulations states that these provisions limit the DOI's discretion to decide against cancellation. In its discussion of the reason for setting minimum production levels for continued operation a 1 percent rather than 2½ percent annually the preamble says: "If the lessee produces less than the rate specified in the mining plan, the DOI may cancel the lease for failure to comply with the plan; however, if the lessee fails to produce 1 percent annually, the DOI's discretion to decide against cancellation would be substantially limited as set forth in 43 CFR 3523.2 -l(b)(1)(i) (remodified as 3452.2-l(c), This ability to elect whether or not to cancel a lease if annual production is between 1 percent and the higher rate specified in the mining plan provides the DOI with leverage to pressure those in arrears to increase production and to cancel leases when there is not a good faith effort to comply with the mining plan" (41 F.R. 56,646, Dec. 29, 1976).

[37] Secretarial Issue Document on Federal Coal Management Program, Department of the Interior, March 1979, issue paper No. 14. In the preamble to the May 1976 regulations, it was observed that: "It should be understood that, while the DOI has provided a definition of diligent development for the future, it reserves the right to sue for cancellation of existing leases where lessees have not made a reasonable effort heretofore to develop the coal resources, " 41 F.R. 21780, May 28, 1976.

[38]90 Stat.1086, 30 U.S.C, 202(a)(4).

[39]After an LMU has been designated under sec. 5 of FCLAA, any mine plan approved for that LMU "must require such diligent development, operation, and production so that the reserves of the entire unit will be mined within a period established by the Secretary which shall not be more than 40 years." While not requiring amendment of lease terms to incorporate the diligence requirements, these conditions on a mine plan approval could result in production exceeding requirements of the 1976 regulations for diligent development and continued operations which allow a pre-FCLAA lessee to mine his lease for 97½ years after meeting diligence,

[40]See for example, the lease form reprinted in Hearings on Federal Coal Leasing Before the Subcommittee on Mines and Mining of the House Committee on Interior and Insular Affairs. 94th Cong., 1st sess. (1975), at p. 41.

[41]A lease provision incorporating subsequent regulations makes viola lion of these regulations grounds for cancellation under sec. 31 of the Mineral Leasing Act which provides that leases may be canceled for breach of general regulations that were in effect a t the date the lease was issued. If, however, the 1976 diligence regulations are determined to be only interpretive regulations (i.e., those advising lessees and the public of the DOI's view of diligence under the act], then the limitation on regulations in effect at the date of issuance is not applicable

since the cancellation would be for violation of the act as interpreted by DOI. Departmental interpretations of matters committed to their discretion are generally followed by the courts even though alternative reasonable interpretations be made. Over time, departmental interpretations of law can become binding on DOI, See Andrus v. Shell Oil Co.,—U.S.—No. 78-1815, June 2, 1980 (Slip Opinion) p. 15.

[42] Mobil sued DOI in the District Court of Wyoming challenging the Secretary's authority to impose diligent development regulations on its Rojo Caballo lease in Campbell County, Wyo. The settlement provided that: 1) Mobil agreed to dismissal of the lawsuit with prejudice: 2) Mobil would take all steps necessary after mine plan approval so that a mine capable of producing coal in amounts to meet diligence would be in place not later than June 1, 1989: and 3) The extension is applicable to Mobil only and cannot pass with any assignment of more than 49 percent of the interest in the lease to anyone other than a Mobil affiliate. On Apr. 23, 1980, Secretary of Interior Cecil Andrus signed a letter approving Mobil's application for an extension of the diligent development deadline to June 1, 1991. The extension approval was based on information submitted by Mobil that it had contracts demonstrating that it could market the necessary 2½ percent of the LMU reserves after 1986.

[43] U.S. Department of the Interior, Secretarial Issue Document on the Federal Coal Management Program, Issue Paper No. 14, July 1979.

[44] See defendant's Brief in Support of Its Cross-Motion for Summary Judgment, Mobil Oil Corp. v. Andrus, No. C79-110B (D. Wyo. 1980).

[45] See 43 CFR 3475.5(c) and 3452.1.

[46] 30 U.S.C. 202(a),

[47] 43 CFR 3400.0-5 defines MER but does not impose specific requirements on existing leases.

[48] Proposed rules including MER requirements were published on May 19, 1980 (45 F.R. 321 15). In spring of 1981, DOI announced that substantially revised proposals for MER and diligence regulations were under consideration with publication for public comment tentatively scheduled for autumn 1981.

[49] U.S. Department of the Interior, Annual Federal Coal Management Report Fiscal Year 1980, March 1981, pp. 26-27.

[50] California Portland Cement v. Andrus. civil No. C79-0477 (D. Utah, Dec. 30, 1980); Rosebud Coal Sales v. Andrus. civil No. C-79-1608 (D. Wyo,, June 19, 1980).

[51] See preamble to final rulemaking on the Federal Coal Management Program, 44 F.R. 42601, July 19, 1979, and 43 CFR 3451.1(d), 1980. The effect of this presumptive waiver of readjustment on the applicability of regulations issued after the prior lease date and of FCLAA provisions to the lease is not specified. However, since DOI has previously maintained that readjustment is not necessary to make general regulations applicable to the lease, DOI probably would argue that waiver would have little effect because the regulations were applicable on promulgation not readjustment.

[52] See "Discussion Pa per," Existing Leases and PRLAs, supra. note 28. p. 1-26.

[53] 43 CFR 3452,1-1.

[54] 90 Stat. 1083, 30 U.S.C. 201(a).

[55] See 43 CFR 3475. (b)(2).

[56] 43 CFR 3435.

[57] The exchanges proposed under special legislation include: over 800 million tons in Federal leases along Interstate 90 in northeast Wyoming: over 300 million tons of PRLA reserves in southwestern Utah; and up to 60 million tons on leases in the Bisti area of New Mexico. Additionally. as much as 400 million tons of reserves in the Lake DeSmet lease blocks might qualify for exchange under SMCRA and over 130 million tons of Federal bypass lease reserves could be involved in the Northern Cheyenne lease cancellations.

[58] Public Law 95-554, 92 Stat. 2269, Oct. 30, 1978, House Rep. 95-469. See also, Cong. Rec. H11391, Oct. 3, 1978 (daily cd.). Among other things, the amendments clarified that coal removed during construction of a right-of-way did not have to be leased competitively and provided that higher minimum royalty rates did not apply to modified leases until expiration of their current terms.

[59] Bureau of Land Management, Lake *DeSmet* Exchange Study, Wyoming State Office, Johnson County, Wyo., July 1979. Texaco is the major holder of private land and mineral rights and only holder of Federal leases in the Lake DeSmet area. The acquired lands would have been used for recreation purposes. Even though the exchange was not approved, Texaco feels that reserves on several Federal leases in the block may qualify for exchange under sec. 510(b)(5) of SMCRA (letter from R.T. Carter, Vice President, Coal and Energy Resources Department, Texaco. to OTA, dated Dec. 19, 1980).

[60] Energy Daily, June 17, 1981, p. 3. The rejection followed negative recommendations by the U.S.G.S. economic evaluation unit on the value of the PRLAs because the PRLAs are located far from existing coal transportation networks. (Personal communication to OTA, U.S.G.S. Conservation Division, Denver, Colo., Dec. 15, 1980.) GAO also circulated a draft report on the exchange questioning the validity of the PRLAs because the applicant did not have an approved prospecting permit when exploratory drilling was conducted on two PRLAs: and the lack of data on the coal reserves required for making the "equal value determination": and expressing concern over the competitive effect of giving Utah Power & Light highly desirable coal lands in central Utah. Letter of Apr. 2, 1981 from J. Dexter Peach. Director, Energy and Minerals Division. GAO, to James G. Watt, Secretary of the Interior. The Utah Power & Light exchange is discussed in the final environmental statement on the Uinta-Southwestern Utah Lease Sale, Bureau of Land Management. 1981.

[61] Several of the Wyoming leases under consideration for exchange were reviewed by the OTA Wyoming task force and are discussed in ch. 6 of this report. The Interstate Highway exchange proposal includes parts of the existing Wyodak Mine and two lease blocks with favorable production prospects by 1986 (Kerr McGee's East Gillette Federal and Carter's South Rawhide Mines). Two other leases—Armstrong and Gulf (No. 3) were given unfavorable development prospects. The final lease, Belco, has uncertain development prospects-contingent on in situ gasification—with unfavorable production prospects in 1986 and 1991. Gulf Oil Co. has requested that the Gulf (No. 3) lease be exchanged for a corridor of unleased Federal coal that splits its Wildcat lease in Campbell County.

[62] 94 Stat. 2269, Oct. 19, 1980).

[63] See Senate Report 96-800. accompanying S. 1455 (June 19, 1980).

[64] 94 Stat. 1701, Senate Report 96-883.

[65] See statement of Senator Melcher, 126 Cong. Rec. S. 11142 (daily cd.), Aug. 18, 1980. According to information obtained at the OTA Wyoming task force, up to 1 billion tons of coal is covered by these leases and permits. Peabody Coal Co., holder of the seven leases and three permits, is seeking rights to 130 million tons of Federal bypass coal in return for cancellation of its tribal lease claims.

[66] 30 U.S.C. 1260(b)(5).

[67] Regulations providing for alluvial valley floor exchanges were challenged as part of litigation involving the surface mining act regulations. The AVF exchange regulations were remanded to DOI to include provisions implementing the mandatory exchange program for non-Federal lands. See con-

ference report on H.R. 2, House Report 95-493, July 12, 1977, pp. 104-105:

> The Senate amendment also provided authority for the Secretary of Interior to lease Federal coal deposits as an exchange relinquishment of a Federal coal lease for coal affected by this alluvial valley floor constraint. Such an "exchange" would be limited to those operators who had made a "substantial legal and financial" commitment to mine such coal prior to Jan. 1, 1977. Similar exchange authority under sec. 206 of the Federal Land Policy and Management Act of 1976 was granted the Secretary with respect to "fee" coal owned in alluvial valley floors. Both of these authorities were discretionary on the part of the Secretary.
>
> The conferees also stipulated that the Secretary develop and carry out a coal exchange program for fee coal located in alluvial valley floors under the provisions of sec. 206 of the Federal Land Policy and Management Act of 1976.
>
> The language added by the conferees to the "Wallop Amendment" of the Senate version is designed to make it clear that the Secretary should actively implement the coal exchange program. This program would apply to all those private coal deposits, regardless of any previous financial or legal commitments, which the Secretary determines cannot be mined because of the provisions of sec. 510(b)(5). The program would not apply to privately owned coal which might have been mined in the same operation but which can still be mined.

*43 U.S.C. 1716, Regulations implementing sec. 206 have been promulgated but are under review by the Reagan administration.

'9Exchanges of checkerboarded lands covering critical winter range for big game species in the Atlantic Rim area near Rawlins, Wyo. have been suggested. See also, R. C. Anderson and A. Silverstein, Management *of* Federal *Coal* Properties in Areas *of* Fragmented Resource Ownership (Washington, D. C.: Environmental Law Institute, 1980) for discussion of exchanges for unitization of coal reserves.

70See Management *of Fuel* and *Nonfuel* Minerals in Federal Land, Office of Technology Assessment, April 1979, ch. 3, for discussion of various provisions for obtaining development rights for other leasable and hardrock minerals.

71See ch. 3 of this report.

7290 Stat. 1085. There were about 192 prospecting permits pending on passage of FCLAA and 28 prospecting permits. The number of PRLAs has dropped as some applications were rejected and now fluctuates between 171 and 178 depending on the results of various appeals of rejected applications. All prospecting permits have since expired. As of March 1981 the number of PRLAs had dropped to 171 as a result of: 1) addition of two new applications because of litigation challenging the DOI's denial of extensions of prospecting permits for which no applications had been filed at the time the 1976 FCLAA was enacted; and 2) the withdrawal of seven applications.

73The Summary Paper on Management of Preference Right Lease Applications (Office of Coal Leasing Planning and Coordination, *Secretarial Issue* Paper: Formulation *of* Proposal *for Coal* Programmatic *Environmental* Impact Statement (Washington, D. C.: U.S. Department of the Interior, June 23, 1978, Tab I) estimated maximum potential production from pending PRLAs to range from 186 million tons/year (if legal, probable and possible planning and environmental restrictions are applied) to 248 million tons (no restrictions applied). This was based on 40-year mine life on estimated recoverable reserves of 9.9 billion tons. The estimated reserves under PRLAs have been subsequently reduced to 5,7 billion tons (due primarily to elimination of an estimated 3.6 billion tons of subbituminous underground reserves in the Wyoming Powder River basin). If the lower reserve figures are substituted for those in the Secretarial issue paper, the range of potential production drops to between 108 million and 144 million tons, OTA's analysis of PRLAs in Wyoming indicates that approximately 40 million tons of potential production capacity in this revised number have unfavorable development prospects (see ch. 6 and OTA's Wyoming task force report). When OTA's estimates of potential production capacity of PRLAs in Wyoming with favorable or uncertain development prospects (20.5 million tons/year) are substituted for the revised numbers for Wyoming in the Secretarial issue paper, the range of total production potential becomes 69,5 million to 102.5 million tons/year. OTA's analysis of production potential of PRLAs in the 1990's is based on the following modifications of DOI's production estimates: Colorado, 9 million to 17 million tons; Montana, zero to 7.7 million tons; New Mexico, 7,5 million to 9.5 million tons; Oklahoma, zero to 0.4 million tons; Utah, zero to 6.5 million tons; Wyoming, 20 million tons. OTA's adjusted annual production totals yield a range of 35 million to 60 million tons including about 10 million tons of production capacity associated with existing leases and reflected elsewhere in this report as Federal mine production. Total new annual production potential of PRLAs would thus be between 25 million and 50 million tons. Some PRLA reserves in eastern Colorado and Wyoming were found to have some potential for use as a feedstock in synthetic fuels processes, but substantial production from these PRLAs is likely only if there is greatly expanded demand for such coal in the 1990's.

74Initial production from most PRLAs can be expected in 1988-94 assuming that it takes about 6 years for mine development from the date of lease issuance. Several groups of PRLAs will be issued during 1981 to 1982 under an accelerated processing schedule: these PRLAs include four in Colorado and the Arch Mineral PRLAs in New Mexico.

75105 of 172 applications submitted to BLM did not contain information proving that commercial quantities had been discovered, but rather stated that the requisite data had been provided to the U.S. Geological Survey, Seventy-five PRLAs were filed without the required qualifications statement describing the applicant, and 70 PRLAs were filed without precise descriptions of the acreage covered by the application. In addition, 25 PRLAs did not file initial showings in a timely manner required under the 1976 regulations (Coal task force No. 124, An Evaluation *of* Coed Preference *Right* Lease Applications, Washington, D. C., U.S. Department of the Interior, April 1978). In most instances, the regulations or DOI practices allow the applicant to correct the application by supplying the required information, If the applicant does not respond with the requested information then the application can be rejected. See, for example, 43 CFR 3430.2-2, 1980.

76Coal task force paper No. 124 identified six PRLAs that did not properly indicate the existence of recoverable reserves and four PRLAs that were not filed before the expiration date of the prospecting permit. Several of these PRLAs have subsequently been rejected.

"Preference right leases were issued in 1974, 1975, 1976, and 1977 in accordance with short-term leasing criteria in effect at that time. The four leases (one issued in each of those years) range in size from 175 to 14,902 acres.

78See 41 F.R. 18845, May 7, 1976 (final rules); see also proposed rules published at 41 F.R. 2648, Jan. 19, 1976.

"According to the Preamble to the Proposed Rules, use of the workability standard for classification resulted in a determination of commercial quantities "based solely on the physcial characteristics of the mineral without regard to costs such as transportation and reclamation, " The use of this standard was rejected. 41 F.R. 2648.

'43 CFR 3430.1-2.

8143 CFR 3430.5.

82*NRDC* v. *Berklund*, 458 F. Supp. 925 (D.D.C. 1978).

'3458 F. Supp. 937.

[84]458 F. Supp. 937.

[85]The ability of DOI to exchange leases or PRLAs for unleased Federal coal without specific congressional approval is relatively limited, but 43 CFR 3435.1 allows PRLAs to be relinquished in exchange for other rights, including: 1) the issuance of coal lease bidding rights of equal value; 2) a mineral lease other than coal by mutual agreement by the applicant and DOI; and 3) modification of other coal leases held by the applicant.

[86]458 F. Supp. 938. The decision notes that it left open the question of whether such withdrawal would constitute a taking since, under 43 U.S.C. 1701, withdrawals are subject to valid existing rights.

[87]*NRDC* v. *Berklund*, 609 F. 2d 553 (D.C. Cir. 1979).

[88]448 F. Supp. 962 (D. Ut. 1979)

[89]448 F. Supp. 988 (D. Colo. 1979).

[90]A total of 118 certified abstracts were received by DOI, as well as 21 certificates and 9 letters. Nineteen applicants did not respond and five PRLA holders were not contacted because of pending litigation.

[91]Bureau of Land Management Instruction Memorandum No. 76-646, change 2, Dec. 19, 1979.

[92]See 30 U.S.C. 521-523, especially 30 U.S.C. 524, 525, 526 and 527.

[93]43 U.S.C. 1744.

[94]43 CFR 3430.1-2

[95]*Samuel Pulford*, 45 L.D. 484, 1916.

[96]*NRDC* v. *Berklund*, 458 F. Supp. 925 (D. D.C. 1978).

[97]The legal basis for this argument is set forth in a letter from Terence Thatcher, counsel for the National Wildlife Federation to Frank Gregg, Director, Bureau of Land Management (re: comments on Bureau of Land Management Proposed Coal Leasing Management Regulations: PRLAs, May 18, 1979). In 1975, the Environmental Defense Fund and Natural Resources Defense Council concluded that a number of PRLAs in the Powder River basin, Wyoming could be challenged on this basis, but decided that litigation challenging such PRLAs would need to be done on a case-by-case basis when (or if) the leases were actually granted.

[98]44 F.R. 42599, July 19, 1979.

[99]See 30 U.S.C. 1260(b) abd 30 U.S.C. 1272(a).

[100]30 U.S.C. 1272(a)(3).

[101]See 16 U.S.C. 1.

[102]Some PRLAs in the San Juan Basin of New Mexico are located within a few miles of Chaco Canyon National Monument and its "outliers". Chaco Canyon was established primarily to preserve the Indian archeological sites there: it is likely that any protective stipulations on mining in the area would be directed at minimizing any harmful effects of mining on the archeological sites and not at preserving scenic vistas.

[103]See notice at 46 F.R. 30202, June 5, 1981.