7--LEGAL MECHANISMS FOR ACCESS TO COAL AND OIL SHALE

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A. Introduction: Principles

Access to mineral deposits is governed first by the obvious question, "Who owns the land?" Actually, the question should be "Who owns the minerals under the land?" There is an ancient maxim of law that the owner of the soil owns as well the air above and the earth below--all the way up and all the way down. The owner of land may dispose of it as he wishes; he may sell, lease, or otherwise dispose of his rights to the land, and he may carve up his interest in any way which pleases him. The principal importance of this in mineral law is that a landowner may sever the surface and mineral estates (rights), selling or leasing one and retaining (or selling or leasing to someone else) the other. He may, in other words, divide his land both vertically (by dividing the surface) and horizontally (by severing the mineral estate, or even by severing different mineral strata and disposing of or retaining them separately). It is common for land to be conveyed with a reservation of mineral rights, or vice versa.

However, if the mineral estate is severed, the mineral estate becomes the "dominant" estate and the surface of the "servient" estate (that is to say, secondary in right to the mineral estate), which means that the owner of the surface may not use his ownership to interfere with the use of the mineral estate beneath. Use of the mineral estate means doing what is necessary to remove desired minerals from beneath

the surface of the land and carry them away. The owner of a mineral estate has the right of access to it, and the right of entry onto the surface as is necessary to exploit his mineral estate. He may build such improvements (roads, buildings, etc.) as are necessary to his use of the mineral estate. What he does must be "reasonable," and must not unreasonably injure the surface estate (for example by removing coal in a way that causes subsidence); a bond may be required to protect the surface owner's estate. The same rule applies in theory to strip mining--as generally understood, a lease or other interest in the mineral estate does not entitle its owner to devastate the surface. However, the damage "reasonably" necessary to conduct strip mining operations may be very extensive indeed. While it may be true that the owner of the dominant estate may not destroy the usefulness of the servient estate without being liable to compensate the surface owner, even such compensation may be inadequate from the standpoint of the owner of the surface. If the owner of the mineral estate decides to exploit his estate by strip mining, and in the process of so doing utterly destroys the surface, and is required to pay to the surface-owner the full market price of the surface, what has happened in effect is that the mineral-owner has exercised a sort of private eminent domain. This may be unsatisfactory to the people who live above the mineral, but that is the way it is in the absence of overriding state laws to the contrary.

The extent of the interest conveyed in a mineral-land transaction (severance, ownership, leasehold, etc.) and the terms of the transaction (in the case of a lease rent, royalty, duration, etc.) are matters of agreement between the parties. Even general common law principles may be altered by their mutual agreement, subject to the general rules of contract law on unconscionable contracts, equity, and the like. State and federal police power is, of course, paramount in the areas where it properly applies. A state strip mining law is an exercise of police

power, and overrides any agreement between the parties. Under the Commerce clause of the U.S. Constitution, any coal mines producing coal, for example, which enters the stream of commerce (and just about all coal mines are covered by this provision) are subject to the federal coal mine operating safety laws, as well as to state laws of similar effect. But beyond this, insofar as access to and rights in the land are concerned, it is the intentions of the parties which govern any transaction involving rights to minerals. As will be seen, this is true whether the proprietor of the land is a private citizen, a state, or even the federal government.

So the first question is "Who owns the mineral estate?" If the answer is that title to the mineral estate is held by a private individual, or by a corporation, or by any entity other than a state or the United States (holding title either for itself or in trust for an Indian or Indian tribe), the law which governs access is private law, the law of contracts and real property. Most of the law regulating the relations between vendors and vendees, or lessors and lessees, of mineral estates in private ownership is the result of the common law process. It has grown out of the decisions of the courts in individual deeds and leases, in which the object is always to determine and give effect to the intentions of the parties and to do justice in terms of realizing those intentions and in terms of basic equity. They have general application only in that they govern the interpretation of language in other private agreements in the same jurisdiction. The term of any future agreements involving access to coal or oil shale lands in private ownership will depend largely on what is worked out between the lawyers for the owners and the lawyers for the developers. There are no regulations to be complied with (environmental protection restrictions are exercises of police power and are another story).

Essentially the same principle governs lands in public (state or federal) ownership. In permitting access to mineral deposits on land, the mineral estate of which it owns, the state (or the United States) acts not as sovereign but as proprietor. The whole elaborate mechanism of the federal Mineral Leasing Acts, for example, is not an attempt to regulate access to mineral lands in general but only governs the "intentions of the lessor" when the lessor is the United States. What the law determines and what the regulations regulate is the terms that the owner of the mineral estate will insist on in what is essentially still a private law transaction The regulations bind the government, but the lease incorporating the terms the regulations require (and whatever other terms not required by the regulations but thought wise to insist on by the Bureau of Land Management) is what binds the lessee. In understanding any state or federal mineral leasing program it is essential to remember this basic fact: the end product of the whole process is a lease binding the government as lessor and the developer as lessee. We are accustomed to thinking of regulations as governing citizens directly, but the mineral leasing regulations are nothing at all like, say, the Selective Service regulations. The regulations may require, for example, an annual rent of not less than $1 an acre, but the lease offered by the government may require an annual rental of $6 an acre. Even if no state law requires reclamation of strip-mined lands, a stipulation may be inserted in the lease as offered by the given state requiring such reclamation and setting forth in detail what will be required as compliance, and this binds the lessee not as a matter of public law but as a matter of the private law of his lease. A prospective lessee bids on a lease as offered by the government, and it is the lease the government offers, when signed by the lessee, that is the controlling factor in his access to the lands.

B. Federal Lands

Figure 7-1 shows the multiple aspects of land generally necessary to an understanding of the problems of access to mineral lands. Private lands may be leased or sold at the will of the parties, and state lands may be leased under the provisions of state law applicable in each case, as discussed above. But where the federal government is the proprietor of lands valuable for coal or oil shale, or where (as, for example, under the Stock Raising Homestead Act) the United States has reserved the mineral estate underlying the surface, the land (or mineral estate) may not be alienated under any circumstances. Title will remain in the United States, that is, one cannot buy federal coal lands. Access to coal and oil shale under federal lands may be had only through license, lease, or permit under the Mineral Leasing Laws, principally the Mineral Leasing Act of 1920 and the Mineral Leasing Act for Acquired Lands of 1947, both as amended and amplified by the regulations issued under their authority.

In the days before the Mineral Leasing Act of 1920, access to federal mineral lands was governed by the General Mining Law of 1872. There was a separate act for coal, the Coal Land Act of 1873, which is still carried on the books at 30 USC §§71 et seq., but which has been effectively superseded by the Mineral Leasing Act, as described below. The compilers of the U.S. Code state their doubt that the laws codified as 30 USC §§71 et seq. should even be carried in the Code.) Under the Mining Law (which still governs access to minerals other than those specifically mentioned in the Mineral Leasing Act*) land "chiefly valuable for minerals" was reserved from sale or distribution under the

*The Mineral Leasing Act covers coal, phosphate, sodium, potassium, oil, gas, oil shale, native asphalt, solid and semisolid bitumen, and bituminous rock (including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or quarried). 30 USC §181

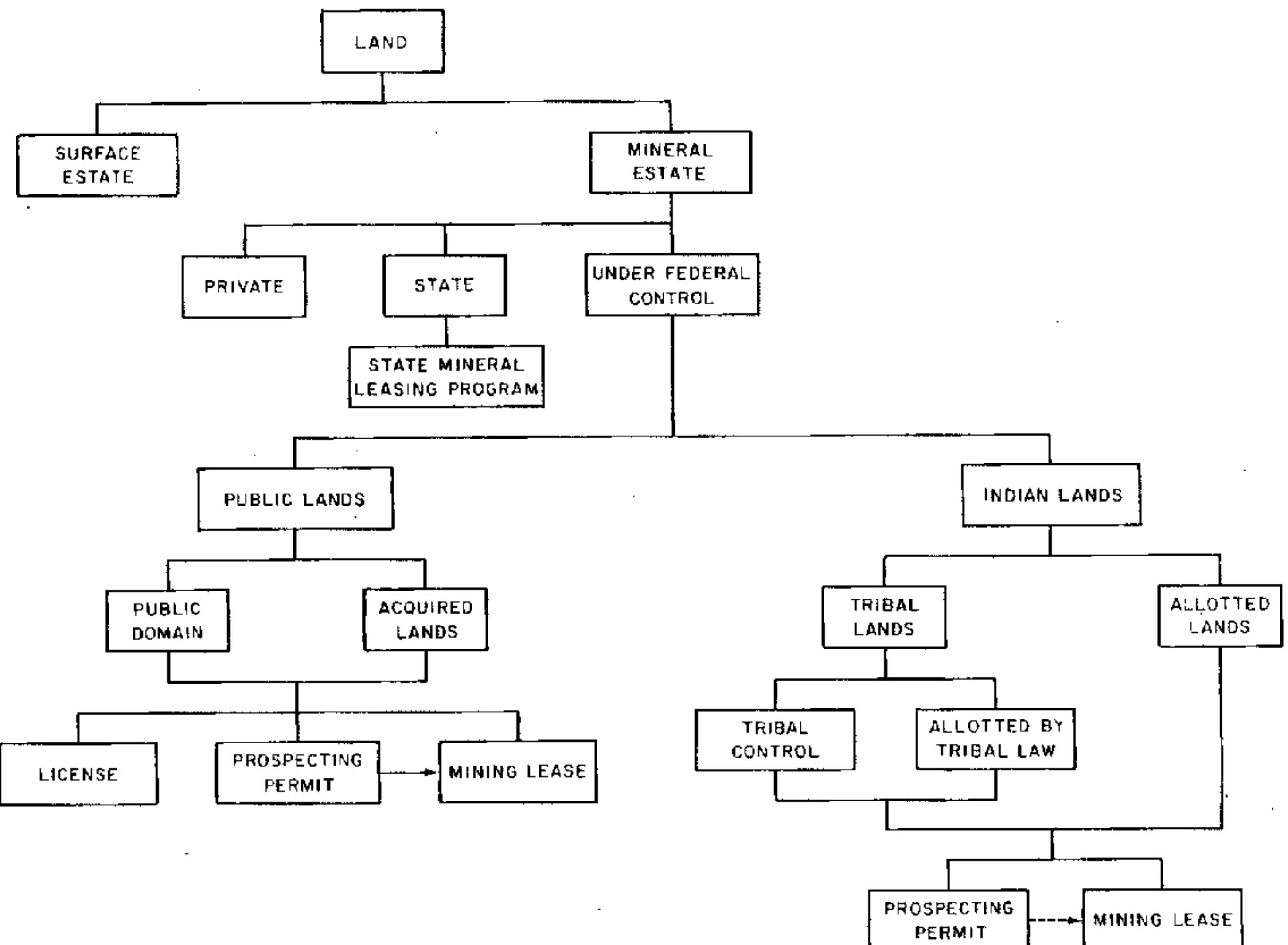

FIGURE 7-1. MECHANISMS OF LEGAL ACCESS TO MINERAL ESTATES

general land laws. Entry for prospecting purposes was, however, generally permitted at will onto public lands. When a prospector discovered a mineral deposit, he could file a mineral location or claim. He was then entitled to the exclusive right to extract the minerals and dispose of them as his own even though he did not hold title to the land. This practice had its origin in the customs of the early western miners, whose customs in the absence of any other law in the mining camps of those days took on the force of law themselves and were more or less recognized and legitimated by the Mineral Location Act of 1872. Although the Coal Lands Act of 1873 differed from this model in some respects, it was similar in approach, and because it is no longer in use, and because the change to the current leasing system was made with reference to the philosophy of mineral development exemplified in the 1872 Act, this part of the discussion does not attempt to distinguish between the practices under the 1872 and 1873 laws.

A prospector who filed a mineral location under the old law had an exclusive right of possession of the surface of the land included within his location, and the right to the minerals beneath it. There were certain limits on acreage covered by each claim (although there was no limit to the number of claims each prospector could file), and to protect his rights against those of a subsequent locator, a certain dollar amount of improvements was required of him to ensure that the mineral deposits were in fact developed and not simply held for speculative purposes. But as long as he was engaged in mining activity, the fruits of his labor were available to him without charge.

Title to land worked under a mineral location remained in the United States unless an application was made for a patent. Frequently, since the location was sufficient to secure exclusive possession of the surface and access to the minerals beneath it, miners proceeded under these locations until their mines were worked out, at which point they simply

abandoned their claims and moved on. If, however, a miner wishes to acquire title to the lands from the government, he could do so easily. His proof of mineral discovery (which he needed in any case for his location) and proof of improvements totalling $500 in five years usually sufficed to secure him, if he wished, a patent on the lands. In return for $2.50 an acre for placer claims, and $5.00 an acre for lode claims, the United States would patent to the miner a fee simple estate (absolute ownership) in the lands.

The purpose of these liberal mining laws was to encourage the development of the mineral resources in the public lands of the West. But in the early years of the 20th century it began to be called into question whether this encouragement was any longer needed, whether this policy of permitting almost unlimited transfer of public mineral lands was any longer serving the public interest. At the time, the conservation movement was gaining political power in the United States. In addition, there were massive oil strikes in California, all of which were subject to patenting under the Oil Placer Act of 1897. The freedom given all citizens, discoverers of oil and (under the Oil Placer Act) those who had sense enough to file locations on land adjoining known strikes, promised a rapid transfer of the California oil fields into private control. In 1909 the Director of the U.S. Geological Survey (USGS reported to the Secretary of the Interior that at the rate public oil lands in California were being located and patented by private parties, it would

> "be impossible for the people of the United States to continue ownership of oil lands for more than a few months. After that the government will be obliged to repurchase [for the Navy and other government purposes] the very oil that it has practically given away."

The Director of the USGS asked that the filing of claims on the California oil lands be suspended pending legislation on the subject. On September 27, 1909, President Taft issued a proclamation "in aid of proposed

legislation" withdrawing over 3,000,000 acres of public domain oil lands in California and Wyoming from location, entry, or disposal under the mining laws. There was some question of the constitutionality of the executive withdrawal of public domain lands from entry and location* and authority was sought and obtained from Congress for this sort of withdrawal. The law granting this authority was known as the Pickett Act (43 USC §§141-3).† The Pickett Act gave to the President authority

> "at any time in his discretion, temporarily [to] withdraw from settlement, location, sale or entry any of the public lands of the United States. . .and reserve the same. . .for public purposes. . .and such withdrawals shall remain in force until revoked by him or by an Act of Congress."

During the years 1910-20, most of the public domain land was withdrawn by executive action from location for nonmetalliferous minerals, and there was a vigorous debate in the Congress on what the new federal policy should be in this area. In 1920 it was decided and enacted that public domain land valuable for coal, oil, phosphate, oil shale, gas and sodium should be developed only by lease, reserving title (and such control over its development that the leasing method would provide) to the United States, rather than permitting the alienation of mineral lands by patent. From the enactment of the Mineral Leasing Act on February 25, 1920, forward, the older Mining, Coal, and Oil Placer Acts ceased (except in situations relating to claims filed before enactment) to have application to coal and oil shale development, and the Mineral Leasing Act

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*Resolved in favor of its constitutionality in United States v. Midwest Oil Company, 236 U.S. 459 (1915).

†(The constitutionality of the Pickett Act has never been decided by the Supreme Court, but the Attorney General has ruled in its favor, 49 Op. Atty.Gen. 73 [1941]. Especially in light of the Midwest decision cited, however, there is not really any serious doubt of the constitutionality of withdrawal of public mineral lands.)

became the keystone of the law relating to development of coal and oil shale on the vast public domain.

The phrase "public domain" requires some explanation. It will be noted in Figure 7-1 that a distinction is made between public domain land and acquired lands. The Mineral Leasing Act of 1920 itself only covers public domain lands, which are not coextensive with the lands owned by the federal government. Public domain lands are those lands to which title has never been in state or private hands since the land became subject to United States sovereignty by conquest or treaty, but which have been in federal ownership since the beginning of American dominion.* A great portion of the lands in Montana, Colorado, and Wyoming are public domain lands, never having been alienated by the United States. The Mineral Leasing Act of 1920 also applies to the mineral estate of public domain lands where the surface estate was severed and conveyed but the mineral estate retained, as was the case under the Stock Raising Homestead Act.

West Virginia, on the other hand, was formed from Virginia during the Civil War and Virginia was one of the original states. Title to (as opposed to sovereignty over) nonprivate land in Virginia was not originally in the United States, having been transferred from Crown to Commonwealth at the time of independence or before. There are, therefore, no public domain lands in West Virginia.

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*Lands that were in private ownership at the time of cession to the United States remained in private ownership; sovereignty changed but proprietorship did not. In some cases, however, depending on the law which applied before cession, only the surface estate was in private ownership and the mineral estate, or part of it, was in the possession of the former sovereign and therefore passed to the United States and is in the public domain. This is an intricate problem of title which has to be resolved on an individual basis for the lands in question.

The situation whereby the Mineral Leasing Law, and its underlying policy, applied to some federal lands and not to others was an anomalous one to say the least, and it was cured by the passage of the Mineral Leasing Act for Acquired Lands (30 USC §§351 et seq.) in 1947. Under the Mineral Leasing Act for Acquired Lands, provision is made for lands acquired by the United States in other ways to be administered and leased in the same way as are public domain lands.

There are several surviving applications of the difference between public domain lands and acquired lands for federal mineral leasing purposes. First, not all acquired lands are covered. As with public domain lands, some lands are excluded from disposition under the Act, including lands in incorporated cities, towns and villages, lands in national parks or monuments, lands in military petroleum or oil shale reserves, etc. Lands acquired for development of their mineral deposits and land acquired by foreclosure or otherwise for resale are excluded from the Acquired Lands Act. Also, there are certain technical differences in the wording of the two Acts. For example, the 1920 Act excludes "lands within the naval petroleum and oil shale reserves," whereas the Acquired Land Act excludes "lands set apart for military or naval purposes, including lands within the naval petroleum and oil shale reserves." It therefore becomes important, if there is coal discovered beneath some vast military gunnery range in Utah, whether the lands are public domain (in which case they would be subject to leasing under the Act if the decision was made to switch the use of the land from gunnery to mining) or later acquired (in which case they would be excluded from the leasing program by the language of the statute). These are concerns that matter only as to individual tracts, but the distinction is still important for this reason.

Second, acquired lands may be sold. This is not to say that patents can be awarded as under the old system, but public domain lands chiefly valuable for Leasing Act minerals may not be sold.

Third, acquired lands are frequently under the jurisdiction of some agency of government other than the Bureau of Land Management. If that is the case, the head of the government agency having control over the lands is to be called to report whether he has objections to the lease being granted. If he recommends a special stipulation be inserted into the lease to protect the interest of the United States, that will be done. If the lands are segregated for a special purpose, that purpose is to be considered the dominant purpose of the land, and mining operations under lease will be permitted only insofar as they are consistent with the primary purpose of the land. The point is that acquired lands acquired for mineral purposes are excluded from the application of the Mineral Leasing Act for Acquired Lands, and acquired lands acquired for some other purpose may well be being used for that other purpose or at least be administratively segregated for another purpose, and fall under the jurisdiction of some other agency, in which case additional steps must be taken to involve the administering agency in the terms of a proposed lease, to protect the primary purpose of the land, and so on. (Public domain lands may also be administratively segregated.)

Fourth, lands leased under the 1920 Act and lands leased under the Acquired Lands Act are computed separately for purposes of acreage limitations on coal leases, and those held under one Act are not credited against the limitation of the other Act. The acreage limitations for each Act are the same--it is the intention of the Acquired Lands Act that the acquired lands subject to the Act be administered in the same way as the public domain lands--but the separate computation provides a loophole to permit a lessee to go the limit in a given state twice.

Beyond these differences, however, the distinction between public domain and acquired lands does not have much significance. The lines on the chart now rejoin, and we turn our attention to the three methods of disposition--license, permit, and lease--without further reference to the distinction. It should be noted that the following discussion applies to coal only. Although oil shale is a Leasing Act mineral, access to oil shale on federal lands presents special problems and will be dealt with separately at the conclusion of the discussion of coal.

1. Licenses

A license is a permission to enter on land and do something which would otherwise be unlawful--for example, a license to remove coal--which conveys no interest in the land is (unlike a lease) terminable at the will of the licensor. There is provision in the law for licenses to remove coal from public land without charge. These are of no real economic importance as matters now stand, but they merit a brief discussion because the license concept has great potential for federal aid to cities in providing for their own energy needs at no cost to the municipal budget.

43 CFR §3530.0-1, issued under authority of 30 USC §208, provides as follows:

> "Coal licenses may be issued for a period of 2 years [renewable] to individuals and associations of individuals to mine and take coal for their own local domestic need for fuel, but in no case for barter or sale, without the payment of any rent or royalty. [No corporations, except municipal corporations as follows.] Licenses may be issued to municipalities to mine and dispose of coal without profit to their residents for household use. Under such a license a municipality may not mine coal either for its own use or for nonhousehold use such as for factories, stores, other business establishments and heating and lighting plants."

Usually such licenses to individuals or associations are limited to 40 acres, and licenses to municipalities to various acreages are dependent upon their populations. Provision is also made for four-year coal licenses to be issued to established state relief agencies to take coal for distribution to families on their rolls who need the coal for fuel and cannot pay for it.

As the law now stands, the licensing authority is very limited and the Act specifically prohibits municipalities from taking coal under a license for any other purpose than the household use of its residents. If the law were to be changed, however, it could permit licenses to be issued to municipalities to take public coal for municipal purposes--city power plants, street lighting, public buildings, etc. This would amount to a nonbureaucratic, noncash direct grant of energy to muncipalities, and could be of great benefit to them. Whether the utility company lobbies would permit its application is another question. The existence of provision and precedent for coal licenses is something to think about in forming energy policy in the areas in the West where public coal lands are close enough to allow their use.

On February 17, 1973, Secretary of the Interior Morton announced a moratorium on all coal permits and leases, with certain exceptions, to permit the formulation of a new coal leasing policy, primarily with reference to environmental concerns but also, presumably, with reference to other defects in the present system. (The moratorium had been in effect de facto since 1971.) This action was similar in intent to the executive withdrawals of the 1909-19 period discussed above, in that it stops most further disposition of the public mineral lands pending development of a program to reflect new policies. Under the moratorium, prospecting permits, one of the two major forms of access to federal coal lands, are not being granted at all, and new coal leases are being offered only where they are needed to maintain an existing operation or where coal is needed

as a reserve for production in the near future. In this "short-term leasing program," as it is referred to, the words "short-term" apply to the program and not to the leasing, since under the law, new coal leases must still be for an indeterminate term. But these leases are being offered only on an individually negotiated basis, with extensive environmental stipulations. Very few are being offered at all. The moratorium is expected to extend until the completion and adoption of a programmatic statement on the new coal leasing program. When the new program is completed and approved, it will go into force and the moratorium will be over. The present situation is confused. The new leasing program proposal imposes reclamation and performance standards upon operations mining federal coal. Moreover, there is a bill being considered in Congress that would also modify coal leasing on federal lands. Entitled "Federal Coal Leasing Amendments Act of 1975" (S391), the bill would make six basic changes in the provisions of the 1920 Mineral Leasing Act.

2. Permits

Under the premoratorium system, prospecting permits were awarded in the following way. To begin with, as with public land leases there was a requirement of citizenship. This is not likely to change. Under the Mineral Leasing laws, prospecting permits and mining leases could be held only by U.S. citizens. They might be held by such citizens individually, in associations (if the federal or state laws under which the association was formed and the instrument establishing the association permitted it), or by corporations (subject to the same restrictions).

An alien might participate only as a stockholder of a corporation, and then only if the country of which the alien was a citizen afforded reciprocal rights to U.S. citizens.

Once this requirement was satisfied, the Secretary of the Interior was authorized to issue prospecting permits to qualified applicants (by which was meant applicants who met the citizen requirements, did not hold permits or leases in excess of the acreage limitations, were in fact capable of performing prospecting operations, etc.). The purpose of the permits was to allow entry and prospecting for coal on unclaimed and undeveloped areas of the public lands. Since that was the purpose of the prospecting permit, permits were not granted to prospect areas where the minerals sought were already known to exist in workable quantities.

Permits were issued to prospect areas in 40-acre units not in excess of 5120 acres (eight square miles), or for an amount not to exceed 36,080 acres in combination with other permits and leases in a single state. The permit ran for two years and could be extended for up to two additional years if necessary. Coal lands did not have to be surveyed for prospective purposes, but could be described by metes and bounds, the actual surveying to be done at the expense of the government. The two-year permit granted the permittee an exclusive right of entry and prospecting in the permit area, although no coal was to be removed other than what was needed for experimental purposes or to demonstrate the existence of commercial quantities of coal. A plan of operations had to be submitted and approved. Permit tracts had to be contiguous or at least reasonably compact in form. An advance rental fee was required of not less than 25¢ an acre for the first year, and 50¢ an acre for the next year (or years, if the permit was renewed). There were, of course, no royalties, because no coal was to be extracted for commercial purposes.

As with ordinary mining leases, if the lands were under some other authority than the Bureau of Land Management, stipulations required by the other authority to protect the primary purpose of the land were to be inserted in the permit. (To protect the interests of the United States as potential royalty-owner in the most economical and fruitful development of the lands, there was also required a demonstration that there was a need for additional coal which could not otherwise be met, and that a new coal mine was needed in the area. In practice, however, these additional need requirements were not enforced.)

If, during the two-year period of the permit (or its extension), the prospector demonstrated that he had found coal deposits in his permit area sufficiently extensive and workable to permit commercial exploitation, he was entitled as a matter of right to a regular mineral lease. This was called a preference right lease, and was the incentive and the payoff for prospecting. The concept of the preference right lease is under great criticism at the moment. Among other objections, it is contended that it deprives the government of the bonus it could otherwise expect if it were to conduct a competitive offering, that it is not necessary to the encouragement of prospecting (the price of coal being on the way up), and that it locks up more land in the leasing program without sufficient government control. Preference right leases are not awarded on the successful conclusion of prospecting under a prospecting permit on Indian lands.

During the moratorium, no new prospecting permits have been awarded and the future of the system is in doubt. Since the preference right is included in the law (30 USC §201[b], either the law will have to be changed or the department can simply adopt the policy of denying applications for prospecting permits in the future as it has during the moratorium. This can be justified on the ground that there are already great areas of public land under coal lease that are not producing coal

and that there is at present no need to look for more. It seems likely that the present prospecting permit system will not be a major practical factor in the new leasing program. However, at the moment at least 147 preference right applications are filed and pending, and it is more than questionable, if they meet the requirements of the law, whether they may legally be denied.

The leases awarded under a preference right were, except in the manner of their awarding, similar to ordinary mineral leases to which we now turn our attention.

3. Leases

Procedure. Again, the law and the regulations bind the government, but it is the lease that binds the lessee. Federal coal leases (other than preference right leases) are offered on a competitive basis by advertising the lease it is proposed to offer in a local newspaper of general circulation in the county where the lands lie. The terms of the lease are set forth in the offering and are not subject to negotiation; the competitive bidding has reference to a "bonus" bid that is for the privilege of signing the lease. These leases may be offered either on the motion of an applicant or on the motion of the Bureau of Land Management (BLM), but it appears that in the entire history of the coal leasing program there has never been a Bureau motion lease sale. It has been the practice in the past to await a request from the industry and then to offer the area the industry asks for. A great proportion of "competitive" lease sales did not attract more than one bidder. Sometimes sealed bids were solicited, and sometimes the lease was sold at public auction; latter practice permitted even the original applicant not to bid and to have the lease awarded without paying any bonus at all. Sometimes the two methods were combined. Of course, the awarding of these leases was discretionary, and the right of the Secretary to reject

even the highest bid is preserved in the law, but according to the figures in the Council on Economic Priorities' (CEP) Leased & Lost, single-bid and no-bid awards were not uncommon, and there is an inverse relationship between number of bidders and amount of bonus. The frequently noncompetitive nature of the competitive bid process, the awarding of leases without bonus, and the practice of offering leases on industry demand are all matters which, it can be expected, will be reviewed by the department. Although these practices may well continue as a matter of fact, their continuation should not be counted on in the new leasing program.

Duration. 30 USC §207 sets the duration of federal coal leases as follows:

> "Leases shall be for indeterminate periods upon condition of diligent development and continued operation of the mine or mines, except where such operation shall be interrupted by strikes, the elements, or casualties not attributable to the lessee, and upon the further condition that at the end of each twenty-year period succeeding the date of the lease such readjustment of terms and conditions may be made as the Secretary of the Interior may determine."

This means, essentially, that "coal leases are forever." The requirement of diligent development and continuous operation has not been enforced in the past, although this is likely to change under the proposed rules discussed below. Twenty years must pass before even such basic matters as rents and royalties can be adjusted to conform to current economic conditions. A lease may be surrendered, with the agreement of the Secretary of the Interior, but the government may cancel it for nonperformance of terms only by bringing an action against the lessee in federal court, something which apparently has never happened in the history of the coal leasing program. The result of the indeterminate term and the nonenforcement of the diligent development and continuous

operation requirements has been that very large numbers of coal leases, including those awarded under the preference-right system, are not producing coal. The land is being held unproductive. The Council on Economic Priorities believes that a lot of this is due to developers holding the land for speculative purposes, waiting for the price of coal to rise. Vice-President William Hynan of the National Coal Association takes violent exception to this. He says (and his point is supported by CEP Leased and Lost figures, pp 36-47) that a lot of these leases were awarded in the 1960s, and the time it takes to go from lease to producing mine is quite long. He says that at the time a lease is executed (other than a preference right lease) the developer does not really know where the coal is, or even where to look. This seems surprising, since competitive leases are supposed to be offered on land where the USGS has determined there is coal. Nevertheless, Hynan says that extensive exploration is required, and that before a mine can be operated economically 35 years' worth of coal reserves have to be located, and that in some cases the remoteness of the coal fields requires construction of railroad spurs up to 60 miles long. The whole question of nonproductive leases is the result of ignoring the "diligent development and continuous operation" requirements of the law and the leases which include these requirements. It is an indication of how seriously these requirements have been taken over the years that no definition of "diligent development" or of "continuous operation" had been thought necessary for 54 years after the passage of the act.

New rules were proposed by the BLM in the Federal Register on December 11, 1974. If the new rules are adopted, they will clarify these definitions, and more conscientious applications of the rules can be expected. The original closing date for comments on the new rules was January 10, 1975, but it was extended on January 14 to February 3. Bureau of Land Management deliberations pertaining to these regulations

must now be underway. Mr. Hynan of the National Coal Association objects to the new rules. The scheme the new rules propose for enforcement of these statutory lease terms seems to be a sound one, however little it appeals to coal companies holding unproductive leases, and while it is not possible to predict the outcome of the political process involved in making these proposed rules effective, a statement of the proposed new system will probably be a fair guide to what the new system will be.

Under the new system as set forth in the proposed rules, within two years of the effective date of the new regulations, all federal coal leaseholders must have their leases included in what will be called a "Logical Mining Unit" (LMU). An LMU is defined in the new regulations as

> ". . .a compact area of coal land that can be developed and mined in an efficient, economical and orderly manner with due regard to conservation of coal reserves and other resources and in accordance with an approved Mining Plan."

An LMU may include one or more federal leaseholds and intervening or adjacent nonfederal coal lands under the effective control of the same operator or joined by an approved contract for collective development. Future leases will be predicated on the LMU concept, and existing leases must, within two years, be transformed into LMUs unless that proves impossible, in which case the existing leases will still be considered as if they were LMUs and will thus be included in the new system. This amounts to a reorganization of the existing leasing patterns, and this reorganization is taken as the opportunity to require a new mining plan to be submitted and approved by the Mining Supervisor of the USGS. "Diligent development" is now defined as

> ". . .preparing to extract coal from an LMU in a manner and at a rate consistent with a Mining Plan approved by a Mining Supervisor. . . . ." [emphasis supplied]

and a long list of activities that may constitute diligent development is included in the proposed rule.

> "Activities that may be approved as constituting diligent development of an LMU include: environmental studies, including gathering base-line environmental data and design and operation of monitoring systems; on-the-ground geological studies, including drilling, trenching, sampling, geophysical investigation and mapping, engineering feasibility studies, including mine and plant design, mining method survey studies; and research on mining methods, contracting for purchase or lease of operating equipment and development and construction work necessary to bring the LMU into production. The work performed and the expenditure of monies may take place on or for the benefit of the leased land, or on other lands within the LMU, or at a location remote from the land <u>so long as they are undertaken for the purpose of obtaining production from the LMU.</u>" [emphasis supplied]

"Continuous operation" is defined in the proposed rules as

> ". . .extraction, processing, and marketing of coal in commercial quantities from the LMU without interruptions totalling more than six months in any calendar year, subject to the exceptions [strikes, elements, etc.] contained in 30 USC §207 and in the lease, if any."

A coal lease will therefore in the future, as in the past in theory only, be maintained only on a showing of diligent development or, when required by the Mining Supervisor, continuous operation. New leases will be let on the LMU basis, and old leases will be transformed (or will be considered as having been transformed) into LMUs within two years. A mining plan must be submitted and approved. Within 30 days from the anniversary of the establishment of the LMU in even-numbered years (i.e., every two years) the operator must report to the Mining Supervisor his work and expenditures for the period just past and advise him of his plans for development in the two years to come, to meet to the Mining Supervisor's

satisfaction the requirements of diligent development (if the mine is not in production) or continuous operation (if it is). The Mining Supervisor is responsible for determining whether the lessee is in compliance with the diligent development and continuous operation conditions of the lease, and, presumably, if he is not, action can be taken to recover on his bond or even to terminate the lease on the ground of failure to perform duties required under it. At the moment a lease may be cancelled only by suit in federal court, but it may be that administrative measures can be devised subject to appeal to federal court. Certainly this is possible by stipulation in new leases.

The intent, and certainly the effect if actually enforced, will be to require all holders of federal coal leases to file an approvable plan for immediate beginning of development of coal lands, to get the plan approved, to do what the plan calls for (under the supervision of the Mining Supervisor) to get the mine ready for production, and then to keep the mine in production in commercial quantities at least six months of the year, all under penalty of losing the lease. If the new rules go into effect and are enforced, the new system has the potential for eliminating the problem of leased tracts being unused and will ensure that leases granted for the development of public mineral holdings will actually ensure such development. It is a very ingenious system in the way it brings existing leases under the new system by requiring their conversion into LMUs.

30 USC §208 permits the Secretary of the Interior, in his discretion, to accept in lieu of the continuous operation provision of the lease, an advance royalty on a minimum number of tons of coal. The regulation issued under authority of this provision allows for a payment of such royalties, less rental in lieu of actual production. Section 2(d) of the standard-form coal lease provides that this minimum royalty be equivalent to a royalty of $1 an acre. Since the rental after the fifth

year is also $1 an acre, and since rentals are credited against royalties, this section of the lease in effect gives the Secretary the authority to forget entirely about the continuous operation provision of the lease. That is what has been done in the past. But it is inconsistent with the policy of the proposed rules to permit this in the future. It will be interesting to see whether the Secretary permits this statutory loophole to be used on an ad hoc basis by holders of coal leases to avoid the requirements of the new system.

All federal coal leases are subject to maximum acreage requirements. No one may hold permits or leases in excess of 46,080 acres in any one state except as described below. Partial interests, direct and indirect holdings, percentage of holdings of corporations holding leases, and the like are all calculated and prorated so that no one holds more than the maximum, except that ownership of less than 10 percent of the stock in a corporation is not chargeable, so that in theory it is possible to hold 9 percent interest in 20 corporations, each holding the maximum of 46,080 acres, and avoid the limitation.

As noted above, acreage held in separate states and acreage held on public domain lands as opposed to acquired lands are computed separately and are not charged one against the other. Applications for leases or permits in excess of the maximum will be denied, and if it is discovered that anyone holds acreage in excess of the limit, the leases or permits on the excess land will be cancelled or forfeited.

Cooperative mining, involving pooling of separate leases by separate leaseholders, is permitted with the approval of the Secretary of the Interior subject to restrictions against apportionment of production or royalty to ensure that the cooperative agreements really are cooperative enterprises for the more economical and efficient utilization of the coal resources. They may be exempted from the acreage requirements by the Secretary of the Interior.

Furthermore, a lessee who wishes to secure leases or permits in addition to the prescribed limit of 46,080 acres in a given state may be allowed additional acreage. He must make a showing that the additional acreage is necessary to "carry on business economically" and that it would be in the public interest to grant him more acreage. His application must disclose any interest the applicant (who may be a corporation) has in other federal or nonfederal coal leases and permits within the state, and the estimated coal reserves he has within the state. Additional permits or leases, if granted, will be in multiples of 40 acres, but not more than an additional 5120 acres. The filing of an application for additional lands will cause those lands to be withdrawn from disposition under the Mineral Leasing laws until a ruling on the application is made. Public hearings are required before the additional lands may be let. The new lease may require a cash bonus higher than that required for the original lease, and/or higher rent and/or royalty, and any additional terms the Secretary may wish to impose.

Moreover, a holder of a lease may apply for a modification of his existing lease to include contiguous coal lands or deposits if the appropriate federal official considers such an extension to be in the interest of both parties to the existing lease. If it is simply a matter of tacking on some odd extra land, that is one thing, but if it appears that the lands sought to be included in the modification are capable of independent operation, and that there is a competitive interest in them, those lands are supposed to be offered on a competitive basis.

If a showing is made by a lessee that within three years the deposits of coal in a given 40-acre tract covered by a lease will be "exhausted, worked out, or removed," an additional tract may be leased. An application must include a proposed plan of operation, method of entry, and an estimate of recoverable reserves. Upon a determination that the proposed additional lands constitute an acceptable leasing unit, they

will be offered on a competitive basis and if the applicant is the successful bidder and the new lands can practicably be operated with the lessee's existing leasehold as a single mining operation, the lease may be modified to include them.

Bonds. Under the coal leasing program in force before the moratorium, various bonds were required of holders of federal mining leases. First, there was a "compliance bond" to ensure compliance with the terms of the lease, which for coal was set at $1000 minimum per lease, or $25,000 for coverage of all leases held on a statewide basis, or $75,000 for nationwide coverage. In addition, other bonds could be required in the terms of the lease, including bonds for surface protection in strip mining operations, special bonds for work done on Forest Service lands, bonds to protect the surface interest of a holder of the surface estate under a stock raising homestead patent, and so on. It seems likely that the bonding requirements will be substantially increased, especially with reference to environmental protection, and that the bond will be a substantial factor in access to federal coal lands.

Rents and Royalties. The statutory minimum for rental of coal land is as follows:

For the first year, not less than	$0.25 an acre
For the second year through fifth years, not less than	0.50 an acre
For each succeeding year, not less than	1.00 an acre

Although it has apparently been the practice in the past for the BLM to set rents at the statutory minimum in setting forth the terms of the leases it offers, this need not be the case, and indeed there have been efforts in recent years to set the rates at a higher level. This can be expected to continue, and is especially important when you remember that

these terms, once set, are not adjustable for 20 years under present law.

A rental once due becomes a debt to the United States, and the United States can sue for its recovery. Rentals are credited against royalties, which more or less eliminates the problem for producing mines when the rents are set at the statutory minimum.

The statutory minimum for royalties on federal coal leases is 5¢ a ton. Recent practice has apparently been to set the royalties at a considerably higher rate, as follows:

Underground mining:	15¢ a ton for the first 10 years 17-1/2¢ a ton for the next 10 years
Surface mining:	17-1/2¢ a ton for the first 10 years 20¢ a ton for the next 10 years

In addition, government offerings have been made incorporating a royalty calculated as a percentage of the value of the mine run, again differentiated according to method (strip or auger versus deep mining). There is nothing in the regulations to prevent this, and it seems to be a better deal from the standpoint of the United States as lessor, especially in view of the statutory 20-year period that must elapse before lease terms can be adjusted and of the increasing price of coal. Since the terms of a lease are determined by the BLM as offering agency, subject only to the statutory minimum, there is nothing to stop the government from devising other methods of computing royalties such as the sliding-scale royalties now applicable to oil shale. Royalties could be set at a rate inversely proportional to the sulfur content of coal as a way of encouraging extraction of low-sulfur coal. There are all sorts of things that might be done. The statute only specifies a minimum royalty of 5¢ a ton, and the regulations state specifically that royalties are to be determined on an individual basis before a lease is issued. The regulations also require that the leases be conditioned on the payment of

the royalty, whatever it is, on a minimum annual production beginning with the sixth year of the lease. The royalty thus fixed may be paid, or could be paid under the system in effect before the new LMU rules come into effect in lieu of the continuous production required statutorily under the lease. But since rentals were required anyway and could be credited against royalties, the net amount paid over the rental on nonproducing leases under the old system often turned out to be very little if at all. Thus, a lessor, for payment of a small amount, could hold onto a nonproducing lease for speculative or other purposes. The new rules should more effectively guarantee genuine continuous operation.

On application by a leaseholder, the Secretary of the Interior may determine that the subject mine cannot be economically operated because of the royalty terms, or he may find that further promotion of coal recovery is desirable. In either case he is empowered under the regulations to waive, suspend, or reduce all or part of the royalties. If the government finds a lessee cheating on the mine run and reporting for royalty purposes less than was actually mined, the lessee is liable to a penalty of twice the royalty on the part withheld.

Assignments and Overriding Royalties. A federal mining lease, or any part of the rights held thereunder, may be assigned or subleased with the prior approval of the Secretary of the Interior, provided the assignee, sublessee, or whoever the succeeding party in interest is meets the requirements of being capable of running the mining operation, being in conformity with the citizenship and acreage requirements, and so on. The arrangement between the assignor and the assignee is a matter of private law between them, as are the arrangement between joint holders of federal mining leases, and the mineral leasing laws do not provide a federal common law to regulate the relations between parties. The supreme Court has held to this effect in Wallis v. Pan American Petroleum Corp., 384 US 63 (1966). There is a requirement, however, that an

assignment of a coal lease not create an overriding royalty to be paid by the sublessee to the sublessor in excess of 50 percent over the royalty to be paid to the United States under the primary lease, unless it can be shown that the sublessor has made significant improvements, which justify a higher rate.

Easements. It may be that the land contained within a federal leasehold does not communicate directly with roads or railroads. If the intervening land is also held by the government, it is the policy of the BLM to grant on application an easement over the intervening public lands, for the purpose of building a road or a rail spur or a tramway, etc., subject to stipulations on where the road (or whatever) is to be built, with appropriate environmental restrictions. If the intervening land is is in private hands, it is the government's policy to acquire the easement at government expense and include it in the lease, the thought being that this adds to the value of the leasehold and that this added value will be reflected in the bonus bids. As we have seen, reliance on bonus bids to assure that the government receives maximum or fair economic benefit is not, nor has it been, an effective device. In certain cases an easement will be condemned by the government. In the oil shale leases more recently offered, for example, easements were condemned to make the prototype lease sale easier. This is not ordinary policy, however, but it can be done.

Nondiscrimination in Employment. Federal mining leases are subject to a requirement of nondiscrimination in employment on grounds of race, creed, color, or national origin, as well as various other provisions for the protection of mineworkers (workers must be paid twice a month, there are restrictions on hours worked, etc.).

Adjustment of Terms. The right reserved in the lease (and in the statute) to adjust "reasonably" the terms of the lease after 20 years

poses some difficult problems. In the past the practice has been to adjust the terms of the lease to conform to the leases being issued at the time of the adjustment. But as appear likely, the terms of new leases contain rent and royalty provisions considerably above those of the past, and the reclamation and environment restrictions in new leases differ dramatically from those of 20 years ago, there may be some conflict as the meaning of the term "reasonable." Before the expiration of the 20-year term, the BLM may set forth new terms, and the lessee is deemed to have agreed unless he files objections. If he files objections, there may be no compromise possible.

One suggested remedy is for the government to sue for cancellation, and for the lessee to defend on the ground of illegality of the new terms.* This seems cumbersome at best, and has not been done in the past; it seems likely that in most cases administrative appeals channels will provide an acceptable compromise. Since the Secretary is entitled by the lease to adjust the terms subject only to a requirement of "reasonableness," and since courts are very unwilling to find abuses of discretion or unreasonable conduct on the part of responsible officers of government, a lessee would be well advised in most cases to accept the best deal he can get, and if he cannot live with it, to take advantage of the other terms of the law that permit the Secretary to waive royalties or give other indulgences if it appears that the mine cannot be run economically otherwise. As a last resort a lessee can apply for suspension of operations or surrender his lease. It seems unlikely that the department would impose ruinous terms on a lessee in any other than the environmental area. However, should a federal lessee feel that "ruinous

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*Parr, J. F., "Terms and Conditions of Federal Mining Leases," Rocky Mountain Mineral Law Foundation Institute on Federal Mineral Leasing (non-oil and gas), (1971).

terms" had been imposed in the environmental area, he would be unlikely to find relief in the courts because they would be inclined to find the Secretary's action "reasonable."

4. Federal Requirements in Pricing

There exists a provision in 30 USC §187 stating:

> "Each lease shall contain. . .such. . .provisions as [the Secretary of the Interior] may deem necessary to insure the sale of the production of such leased lands to the United States and to the public at reasonable prices, for the protection of the interests of the United States, for the prevention of monopoly, and for the safeguarding of the public welfare."

So let the developers beware: there is a provision that can be used to regulate coal prices. If it is the lease it can be used, and if it is not the lease the validity of the lease is open to question.

C. Indian Lands

The rules governing mineral leasing on Indian lands are essentially the same in outline as those governing mineral leasing on public lands, but differ in several important particulars. Distinction must be made among lands that are tribal lands, owned by the tribe as a corporate or quasi-corporate unit, lands that are allotted to individual Indians, and lands that, although held by Indians, are not subject to restrictions on alienation by the Bureau of Indian Affairs (BIA).

Tribal lands may be leased by the tribal council or other authorized representative of the Indian's tribe, with the approval of the Secretary of the Interior. Indian leases may, with the permission of the Secretary of the Interior, be negotiated separately and privately on an individual basis. This method is coming into increasing favor since it permits lease provisions requiring, e.g., employment of Indians in the construction of mining improvements, building of a health care

center for Indians in the area (provisions such as this have been included in negotiated leases in the Southwest), and so on. Concern that the BIA is lax in representing the interests of the Indians in negotiating leases is eased where the lease is negotiated by an informed and hard bargaining representative of the tribal council. In such a case the possibilities are good for the Indians to get something substantial in return for access to the mineral deposits under their tribal land. The potential developer should be aware that much may be required from him, including some form of economic partnership in the production of the mine and his doing things for the benefit of the Indians, which have no counterpart in other mineral leases. It depends, of course, on what the negotiators for the developers and the negotiators for the Indians decide between them.

When the negotiated lease method is not used, the terms of the lease will be somewhat parallel to those of a regular mining lease. The lease tract must be advertised for sale and bids taken for bonuses in addition to the usual rents and royalties. There is a requirement, for a 25 percent deposit in advance, to be forfeited if the lease is disapproved by the Secretary of the Interior (whose agreement is required to all Indian leases) through no fault of the lessor. The lands are held in trust for the Indians by the United States, and the United States acts as lessor of the lands, as trustee. The Secretary may reject the highest bid, if he believes it is in the interest of the Indians to do so. The BIA takes the role occupied in public land leases by the Bureau of Land Management.

Bonds may be required in varying amounts, but these may be reduced with the consent of the Indians if circumstances appear to warrant it and the rights of the Indians will be protected. The schedule is as follows:

Acreage	Bond
Less than 80 acres	$1000
80 to 120 acres	1500
1200 to 160 acres	2000
For each additional 40 acres	500

A "statewide bond" of $15,000 may be offered, even though lands within the offering may be Indian reservation lands which in fact extend beyond state boundaries. Nevertheless, the bonded land may not exceed 10,240 acres. The bond may be increased when the BIA officer in charge feels it necessary.

The lands must be in a reasonably compact form, and no lease may be offered for a tract extending more than one mile along the outcrop. No operator may hold more than 2560 acres, but a combination of leases, or a lease in excess of the maximum, may be allowed if the Commissioner of Indian Affairs finds it in the interest of the Indians and necessary to permit the establishment of thermal electric power plants or other industrial facilities on or near the reservation. He may insert into the lease a requirement of relinquishment if the facilities are not constructed, and may require advance rental and/or minimum royalty as a condition of the lease.

Indian leases run for 10 years, "and as much longer as the substances specified in the lease are produced in paying qualities." In time of war or national emergency, the U.S. government reserves the right to buy all or part of the output of the leased land at the market price. (There are similar provisions in public land leases.)

Unless otherwise authorized, rents are not less than $1 per acre, royalties not less than 10¢ a ton of coal of the mine run, including slack, and there is a required yearly development expenditure of not less than $10 an acre. In the event of discovery of minerals in paying

quantities, all advance payments may be credited against stipulated royalties for the year for which such advance payments have been made.

On Indian leases, the rent is due for the period of the lease even if the lease has been surrendered or cancelled. Suspension of the rent is permitted with the consent of the tribe and the Secretary of the Interior "whenever during the primary term of the lease [10 years] it is considered that marketing facilities are inadequate or economic conditions unsatisfactory."

Written permission is required from the U.S. Geological Survey (USGS) to begin operations on an Indian lease. Failure to comply with the terms of an Indian lease or the regulations or orders of the BIA Superintendent or the USGS Mining Supervisor subjects the lease to cancellation by the Secretary and the lessee to a penalty of up to $500 for each day the lessee is in violation. The lessee gets notice and a hearing by the Mining Supervisor, with a right of appeal to the Secretary, but proceedings in federal court are not required as they are in an ordinary federal mining lease.

Assignments are subjected to the requirement that the lessee's entire interest be assigned, and not just a partial interest. In ordinary federal leases partial assignments are permitted.

Leases may be surrendered, subject to proceedings against the bond, and cancelled by the Secretary of the Interior if the lessee is in violation of the terms, or cancelled on application of the lessee if a satisfactory showing is made of provision for the protection and conservation of the land. Prospecting permits are allowed, subject to the same requirement that no minerals may be removed except that quantity necessary for experimental or other such work, but a prospecting permit does not entitle a successful prospector to a preference right lease.

The regulations in 25 CFR Part 171, governing the leasing of tribal lands for mining, may be superseded by tribal constitution, charter, or law issued pursuant to the Indian Reorganization Act of 1934 (25 USC §461-79), or an ordinance issued thereunder. Insofar as not superseded, these regulations apply to all leases not privately negotiated, the validity of which requires the approval of the Secretary of the Interior.

Allotted lands, i.e., those that have been allotted to individual Indians in severalty (alone) are let on much the same rules, with certain exceptions. Permission to negotiate privately is for 30 days only, subject to reasonable extension separately applied for, but privately negotiated leases are still subject to rejection by the Secretary and to being offered for competitive bids. There are slightly different rules for disclosure by corporations who seek leases. Allotted lands are held by individual Indians, and although they are still subject to restrictions on alienation and the BIA is still involved to some extent in the title to the lands, they may be passed on by inheritance, which causes some problems if all the heirs cannot be found. The regulations provide for procedures by which leases of allotted lands can still be auctioned even if all the heirs cannot be located. This makes acquisition easier than if the lands were in private hands, or were in the hands of Indians but not subject to BIA supervision, in which case the usual complicated problem of providing clear title to lands to which all the heirs cannot be found would apply. The rule requiring that assignments of leaseholds be of the entire interest of the assignor does not apply to allotted lands. Other than that, the rules are for all practical purposes the same.

It should be noted that the allotments mentioned here are allotments by the United States to individual Indians. Such lands are not tribal lands. Tribal lands may also be allotted by the tribal council to Indians within the tribal system. Such lands are not allotted lands

for the purpose of the law, but these tribal allotments may be leased by the Indians to whom the mineral rights have been so assigned, subject to the terms of the tribal constitution and the approval of the Secretary. Preference is to be given to Indian cooperative associations and individual Indians in making such leases.

When lands are removed from the control of the BIA and restrictions against alienation have been removed, the lands are treated as private lands and neither the Secretary of the Interior nor the BIA is involved at all.

D. Access to Oil Shale on Public Lands

Of the worthwhile oil shale land in the West, 10 percent is in private hands, either because the land is just plain private land or because it was transferred by mining patents or under old homestead laws, which did not reserve mineral rights to the United States. Another 5 percent may or may not have been transferred under patents granted under the grandfather clause in the Mineral Leasing Act covering claims made under the old mining laws before the Mineral Leasing Law came into force. There is, and has been for many years, an incredibly complex debate on the subject of these old claims, some of which do not seem to have been made in compliance with the law in force at the time. The actual result of the dispute is not of major importance, however, since only a small portion of the oil shale land is involved. If the lands return to government hands, they will not be made available for leasing in any event for a long time, as will be seen below. If they are in private hands, either the development will be done by the owners of the patents or the lands, or the use of them, or some interest in them will be assigned by the patentholder on a private law basis.

The remaining lands are public domain lands or Indian lands. These contain the best and richest of the deposits. After the Mineral Leasing

Act went into effect in 1920, there were a few leases given out in the early 1920s, but these have lapsed. In 1930, oil shale reserves on public lands were withdrawn from leasing by Executive Order No. 5327.

The section of the Mineral Leasing Act of 1920, which deals specifically with oil shale is codified as 30 USC §241. There are no regulations issued under authority of this section, and the regulations that do exist under the general authority of the Mineral Leasing Act or other associated statutes scarcely ever mention oil shale. There were regulations initially governing oil shale leasing, and a few leases, since lapsed, were issued in the 1920s. But when some hopeful developers attempted to have some of the land made available for lease in the mid-1960s, the government revoked the regulations. There was another attempt in 1968, as Secretary Udall was leaving office. The Secretary, under conflicting pressures, agreed to accept bids for oil shale leases around Christmas of 1968. However, all of these bids were rejected.

The next attempt was made in 1973, and this was successful. Six tracts were offered, two each in Colorado, Utah, and Wyoming. No one bid on the Wyoming oil shale. The leases in Colorado and Utah went for enormous bonuses. Since there were no regulations covering the oil shale leases, and since the offering of these leases was in the nature of a prototype, the terms of these leases were also the nature of a prototype. The terms were published in the Federal Register of November 30, 1973, along with the order modifying the Executive Order, which had withdrawn the oil shale lands from the public domain. Because this was a prototype program, no further oil shale leases can be expected for quite a few years. The prototype time table is as follows:

- Two years for gathering baseline data and another year for producing a mining plan, as required by the lease — end of 1976
- Two years for study — end of 1978

- Two to three years after study is approved for building of plant — end of 1981
- Two more years for production and evaluation of results — end of 1983.

It is in the nature of a prototype program to see how it turns out before going ahead. This means that it will be 1983 before more oil shale leases will be offered on public lands. This prediction may, of course, be altered by a number of factors. There may be litigation of some sort, which will permit earlier awarding of other leases (although it is doubtful that anyone could sue to be awarded a lease to develop public lands under withdrawal.* There is the possibility that the results of development on private or state lands may accelerate the date on which a sensible decision can be made on the practicality and usefulness of more oil shale leasing on public lands. There also is the possibility that the need or alternative domestic sources of energy may prompt this Administration or another to award more leases without waiting for the results of the prototype program. Even so, with all the environmental requirements, it will be some time before anything can be accomplished on public lands.

Since it is a prototype program, it is questionable how much general application the terms of the four leases actually offered will have. They take up 12 pages of small print in the Federal Register, but they apply only to the parties involved. They are not regulations.

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*See Boesche v. Udall, 373 U.S. 472 [1963], which holds very strongly for the discretion of the Secretary, and effectively removed the word "temporary" in withdrawals as a basis for forcing leases to be issued.

E. Summary of Federal Oil Shale Leases

Although by no means exhaustive, the following summary includes many of the principal terms of the government oil shale leases awarded in 1973. It is essential to remember that these leases were prototype leases and were made on an *ad hoc* basis. There is no assurance whatever that future federal oil shale leases, if any, will follow these terms.

1. Acreage

The acreage is determined by the offering. There were six leases offered, and each one was specific as to the lands included within it. The rules were only one lease to a customer. Since there are no other federal oil shale leases being offered, the question of acreage restrictions has not yet come up.

2. Duration

The leases were for terms of 20 years and for so long thereafter as production is had in paying quantities. This is to be distinguished from the intermediate coal lease, in that if the mine is not in production on the 20th anniversary the lease will lapse by its own terms. There is a provision for readjustment after 20 years; this is done by the government proposing changes to which the lessee is deemed to agree if he does not object within a stated time. If he does object, a compromise is to be worked out, and if that is not possible (there are elaborate appeal procedures) the lease can be terminated by either party at that time. There are provisions for suspension and earlier surrender, but cancellation still requires action in federal court.

3. Bonuses

The applicants bid by means of offering bonuses and the leases in fact went for millions of dollars. The bonuses were to be paid in a first installment with the balance to be paid in four equal annual installments. There is provision, however, for crediting improvement costs against the bonuses. Expenses attributable to operations on the leased property in the first three years may be credited against the fourth installment, and credit for expenses so attributable in the first four years not claimed against the fourth installment may be claimed against the fifth and final installment. After that, credits are allowed against minimum royalties, as set forth below.

4. Rents and Royalties

Rent is set at a flat 50¢ an acre and can be credited against royalties for the lease year (the year from one anniversary of the effective date of the lease to another).

The royalty scheme for oil shale leases is very complex. It begins with a division between oil shale obtained by mining methods as opposed to that obtained by *in situ* methods. For mined oil shale, the basic royalty is 12¢ a ton, varying up or down by 1¢ a ton as the amount of oil recoverable from a ton of oil shale varies up or down from a base of 30 gallons a ton. Thus, at 30 gal/ton, the basic royalty is 12¢ a ton; at 29 gal/ton, it is 11¢; at 31 gal/ton, it is 13¢, etc. In no case, however, is it allowed to go below 4¢ a ton. For oil shale processed by *in situ* methods, the royalty is 12¢ a ton, and there is a very complicated formula for arriving at the proper amount.

The basic royalty is adjusted as a function of the combined average value per barrel of *all crude oil and crude shale oil produced in Colorado, Utah, and Wyoming* (the three states in which leases were

offered). As the combined average value of all this oil goes up or down a percentage point over the year before, the royalties are adjusted by the same percentage. In this way the royalties are tied to oil on other leaseholds, oil in private production, etc., in these three states. In no case may the royalty go below 4¢ a ton.

Credits are allowed against royalties in the sixth through tenth lease years for expenditures attributable to operations on the lease site not claimed against bonus installments. However, if the facility is in actual production, there is no credit allowed against the first $10,000 annual minimum royalty.

The minimum royalty payable on each tract is set separately and individually in the lease offering. There is one figure for the sixth through fifteenth lease years and another for the years thereafter. This can be excused in whole or in part and for as long as the Secretary decides is necessary if the expenditures necessary to meet the reclamation and other requirements of the regulations exceed those in the contemplation of the parties at the time the lease was signed. There are various discretionary provisions allowing the Secretary to make things easier if necessary. This minimum royalty is, by its nature, payable whether there is production or not, but, as an incentive to get into production early, if there is production prior to the eighth anniversary of the lease, and the royalty payable exceeds the minimum royalty payable in any event as stipulated in the lease, the lessee is excused from payment of one half the royalty in excess of the minimum.

5. Bonds

To begin with, there is a compliance bond of $20,000. Then there is a reclamation bond, set for the first three years at $2000 an acre for spent shale disposal sites and $500 an acre for other areas,

and renewable at three-year intervals at a figure to be determined by the lessor as necessary for reclamation and restoration of the site. This may be increased even during the three-year period if there is a change in the development plan, which, in the opinion of the lessor (speaking through the USGS Mining Supervisor), increases the risk and amount of environmental damage. The bond may be released as to land reclaimed and restored to the satisfaction of the government. There is a third bond required in an amount not less than $20,000 conditioned on faithful compliance with 30 CFR Part 231 (Mine Operation Regulations) and 43 CFR Part 23 (Reclamation), the environmental stipulations in the lease, and observation of all federal environmental standards, the development plan, and anything else which might affect the environment. This may be modified as is thought necessary.

A development plan must be filed, setting forth the plan for exploration, development, production, processing and reclamation, a detailed statement of how the lessee intends to comply with the operating and reclamation regulations mentioned earlier, and a requirement that the lessee use "due diligence" to attain, as early as he can in light of the environmental restrictions placed on him, production in an amount equal to the rate on which the minimum royalty stipulated in his lease is computed. The USGS Mining Supervisor looks into the plan, holds hearings on it, and finally, after whatever changes are necessary have been made, approves it. It becomes the basic document; any change in the lessee's plan of operations requires a corresponding change in the approved development plan, etc. There is a requirement of annual reporting of operations.

6. Other Requirements

Other provisions of the oil shale lease require fair employment practices (e.g., hours worked) nondiscrimination and nonsegregation, and

one which reserves to the United States the right to promulgate and enforce orders and authorities pursuant to 30 USC §§187 and 189 to ensure sale of mine output at reasonable prices, to prevent monopoly, and "to safeguard the public welfare."

Assignment is permitted at the option of the lessee, subject to disapproval by the lessor only if the assignee is unqualified to hold a lease or unable to post an adequate bond, or where the assigned or retained portion would, in the opinion of the lessor, be too small to permit economic development. Overriding royalties, except where improvements warrant more, are limited to 25 percent over the royalty fixed in the primary lease.

There are provisions covering surrender and relinquishment, disposition of property on termination, protection of proprietary information, and so on. It is a very comprehensive document, not at all like the four-page standard coal lease. It must be remembered that these are prototype leases; future leases, if any, may be quite different.

Following the lease itself, there is a set of "Environmental Stipulations." These consist of about 15 or 16 columns of Federal Register type; the Table of Contents is reproduced as Table 7-1 to give an idea of the scope of the stipulations. The technique of environmental stipulations included by reference in the lease and thus binding the lessee directly as a matter of private law is a very novel and effective one, which may be considered as a coming idea.

Land in state ownership is sold or leased according to the provisions in the appropriate state code governing disposition of state land. Most of the land that comprises the oil shale and coal-rich western states was originally owned by the United States. When these states entered the Union, certain of the public lands in the states were given by the United States to the state governments. The most important

Table 7-1

ENVIRONMENTAL STIPULATIONS TO PROTOTYPE
FEDERAL OIL SHALE LEASES

Sec.

1 General
- (A) Applicability of Stipulations
- (B) Changes in Conditions
- (C) Collection of Environmental Data and Monitoring Program
- (D) Emergency Decisions
- (E) Environmental Briefing
- (F) Construction Standards
- (G) Housing and Welfare of Employees
- (H) Posting of Stipulations and Plans

2 Access and Service Plans
- (A) Transportation Corridor Plans
- (B) Regulation of Public Access
- (C) Existing and Planned Roads and Trails
- (D) Waterbars and Breaks
- (E) Pipeline Construction Standards
- (F) Pipeline Safety Standards
- (G) Shut-off Valves
- (H) Pipeline Corrosion
- (I) Electric Transmission Facilities
- (J) Natural Barriers
- (K) Specifications for Fences and Cattleguards
- (L) Crossings
- (M) Alternate Routes
- (N) Off-Road Vehicle Use

3 Fire Prevention and Control
- (A) Instructions of the Mining Supervisor
- (B) Liability of Lessee

4 Fish and Wildlife
- (A) Management Plan
- (B) Mitigation of Damage
- (C) Big Game
- (D) Posting of Notices

5 Health and Safety
- (A) In General
- (B) Compliance with Federal Health and Safety Laws and Regulations
- (C) Use of Explosives

6 Historic and Scientific Values
- (A) Cultural Investigations
- (B) Objects of Historic or Scientific Interest

Sec.

7 Oil and Hazardous Materials
- (A) Spill Contingency Plans
- (B) Responsibility
- (C) Reporting of Spills and Discharges
- (D) Storage and Handling
- (E) Pesticides and Herbicides

8 Pollution--Air
- (A) Air Quality
- (B) Dust
- (C) Burning

9 Pollution--Water
- (A) Water Quality
- (B) Disturbance of Existing Waters
- (C) Control of Waste Waters
- (D) Cuts and Fills
- (E) Crossings
- (F) Road Surfacing Material

10 Pollution--Noise

11 Rehabilitation
- (A) In General
- (B) Management Plan
- (C) Stabilization of Disturbed Areas
- (D) Surface Disturbance on Site
- (E) Areas of Unstable Soils
- (F) Materials
- (G) Slopes of Cut and Fill Areas
- (H) Impoundments
- (I) Flood Plains
- (J) Land Reclamation
- (K) Overburden
- (L) Revegetation

12 Scenic Values
- (A) Scenic Considerations in General
- (B) Consideration of Aesthetic Values
- (C) Protection of Landscape
- (D) Signs

13 Vegetation
- (1) In General
- (2) Timber
- (3) Clearing and Stripping

14 Waste Disposal
- (A) Mine Waste
- (B) Other Disposal Areas
- (C) Disposal of Solid and Liquid Wastes
- (D) Impoundment of Water
- (E) Slurry Waste Disposal

portions of these grants are the so-called school sections. Land was divided into rectangular divisions by the public land surveys, and such a division six miles by six miles (36 sq mi) is called a township. Each of these townships is subdivided into 36 sections of one square mile (640 acres), and numbered consecutively. Of the sections in each township, it was the practice in these areas to allocate to the new states sections 16 and 36, or two square miles in each 36, to provide revenue for the support of the state school system. These are the school sections; they comprise a major portion of the state lands in these states. (No such system, of course, existed in coal-rich West Virginia, which is not a public land state, but which was formed from Virginia during the Civil War.) The administration of these and other public lands in the states are under the jurisdiction of State Boards and Land Commissioners (there are various local practices), who have the authority under certain restrictions to lease state lands for mineral purposes.

F. State Lands

1. Colorado

The disposition and control of state lands in Colorado is vested by the state constitution in the State Board of Land Commissioners, who have the right to sell, lease, or otherwise dispose of state lands, whether derived from the school sections or not. It has been the policy in Colorado since 1911 not to sell mineral rights to state lands, but to make them available only through lease.

Coal. The rules for leasing state coal lands are as follows. Prospecting is permitted only with the approval of the Board. Leases are issued by the Board on application, and the Board may, of course, reject any application. The regulations specify that leases are to be issued only "in the name of one party" unless there is a specific

provision of joint tenancy with right of survivorship. While on the face of it, this might raise a question as to the eligibility of associations and corporations, the statutes make regular reference to such organizations.

Leases are let in 40-acre units. The amount of acreage to be included in a single lease is subject to limitation by the Board, but there is no limitation on the number of leases that any one party can hold. If the surface is already leased (for grazing purposes, for example), the Board can, and often does, cancel that surface lease.

Leases usually run for ten years, subject to renewal; renewal is at the option of the Board and is not a right. If, however, a mine is in continuous production (by which is meant production not interrupted for more than six months at a time without an extension granted by the Board), the lease is continued in force as long as there is continuous production. Thus, in contrast to the federal system, if a mine is actually producing, the lease will continue in force but if not it will lapse.

Rentals are set at $1 an acre, yearly, and unlike the federal system, rentals are not credited against royalties.

There is a statutory minimum royalty of 15¢ a ton, a ton being defined as 27 cubic feet of coal. Royalties by statute may be adjusted after five years if the royalty is on a fixed (i.e., not a percentage) basis. In practice, however, royalties are now set at 15¢ an acre or 5 percent of the value of the mine run, whichever is greater, so the opportunity for adjustment after five years is not used. The opportunity comes at the expiration of the lease. There is provision for the setting of minimum royalties due, but if in the year following one exceeds one's minimum, one's payment of royalty for <u>this</u> year <u>over</u> that due on <u>actual</u>

production may be credited against one's excess royalty payment for the next year.

There is an interesting wrinkle in the statute, interesting for the purposes of the synthetic fuels study. The 15¢ a ton statutory minimum has a statutory exception. If the coal is to be used for the production of chemicals, or synthetic fuels, or power at the plant of operation, and not less than 250,000 tons a year are mined, the Board is permitted to set the royalties at 5¢ a ton instead of 15¢. (If fewer than 250,000 tons a year are mined, the reduced statutory minimum does not apply.) In practice, this provision is not used.

The Land Commissioners require a $2000 bond for the protection of the personal property of the surface owner (cow killed by a truck, etc.). The major bond, and it can be quite substantial, for the protection of the land itself is required by the Department of Natural Resources' Division of Mines.

Assignments are permitted with the approval of the Board, which will then issue an assignment lease to the assignee.

Surrender is permitted in whole or in part.

Oil Shale. There is no oil shale to speak of in Colorado state lands. There is apparently a little in Moffatt County, but it is of such low grade that it is not worth considering commercially. The Piceanse Valley, one of the world's major oil shale deposits, is in Rio Blanco and Garfield counties, and there is oil shale in Mesa, Delta, Montrose, and Gunnison counties as well, but unfortunately for the state of Colorado at the time of statehood this land was part of the Ute Indian Reservation and so no school sections were granted the states in this area, but other, so-called "indemnity" lands in other parts of the state were granted instead. The result is that "The State of Colorado doesn't own

an inch of oil shale."* As a consequence, there is no state oil shale leasing policy or program whatever.

Since the public lands in Colorado are vested in the Board of Land Commissioners by provision of the state constitution and since in theory they can sell whatever they like, there is a provision in the law to get around this. If it appears that certain state lands that have "unique economic or environmental value for the public" are, because of their control by the Board of Land Commissioners (which is now an agency of the State Department of Natural Resources), subject to sale, the Director of the Department of Natural Resources may acquire these lands from the Board by condemnation _via_ an intricate interagency transaction.

2. Montana

Coal leasing in Montana has been under a moratorium since 1971, according to the Mineral Leasing Bureau of the Department of State Lands. The Montana legislature is presently considering new legislation on coal leasing, and until that process is completed there will be no new regulations issued.

The old statute (the one presently in force but not being used) provides that the State Board of Land Commissioners be in charge of the leasing of Montana state lands or mineral estates however acquired, that leases have a maximum length of 20 years, and that royalties be individually set by mine depending on local conditions but in no event to be less than 12-1/2¢ a ton.

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*Tom Bretz: Colorado State Board of Land Commissioners.